

## **ADDENDUM No. 4 – Fort Sam Transportation Projects**

### **CITY OF SAN ANTONIO**

#### **Capital Improvements Management Services Department**



**PROJECT NAME: Fort Sam Transportation Projects**

**DATE: August 21, 2011**

This addendum shall be included in and be considered part of the plans and specifications for the above named project. The contractor shall be required to sign an acknowledgement of the receipt of this addendum at the time he receives it and returns the original signed form with the bid package.

CIMS Project No. 40-00015

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#### **COMMENTS AND QUESTIONS FROM CONTACTORS:**

1. Will a primavera schedule be provided?
2. On pg. 215 what is the sf for the signs to be relocated?
3. Should the schedule under general notes call for a 5-day work week?
4. Please check lime percentage and quantity of 75lb/sf?
5. Can slurry lime be used instead of dry and if so, pay item needs to be adjusted. Yes, pay item will be adjusted?
6. Can you please clarify how the time will be calculated for this project? Specifically rain days and how they will be accounted for?
7. Should the construction entrance/exit install and removal be the same quantities?
8. The note on Sheet 14, is this referring to the 6" of temp HMAC used for the detours?  
If not, please clarify then should there be a removal item for the detours?
9. How many project signs will be required?
10. The narrative for the traffic control plan (sheet 37) does not agree with the TCP detail sheets. It is missing a discussion for what will be expected in various phases (e.g. Phase 1, Stage 2, etc.). Will a revised narrative be provided?
11. Should the unit of measure for pay Item 132 2001 Embankment be in Square yards?
12. Could you please provide a detail sheet for the construction of concrete medians?  
Can you please identify the type of wheel chair ramps to be installed in the medians?
13. Will the wheel chair ramps in the median be subsidiary to the median or will they be added to wheel chair ramp pay item quantities along with the others?

#### **RESPONSES FROM CONSULTANT:**



1. A Primavera schedule will not be provided. Consultant will provide a PDF copy of the contact time determination schedule.
2. The SF of the large sign will be determined by the contractor. The quantity included in Plan Sheet 215 LRSA is revised from 48 EA to 2 EA. Quantity is correct on all other sheets.
3. Yes, General Notes item 8 will include note to allow the contractor to work nights and weekends after 48 hour notice and approval by the City.
4. The rate of lime has been recalculated with unit weight of 75 lbs/cf and an application rate of 8% percent per volume. The revised Plan and Profile Sheets (Sheet 140 thru 161) have been included .
5. Yes, item 260-2002 LIME (HYDRATED LIME (SLURRY) has been add to replace item 260-200 LIME (HYDRATED LIME (DRY) .
6. The calendar schedule takes into account City Holidays, average of 1.5 rain days/mo., and working one weekend a month to meet the June 2012 drop dead competition deadline. If work begins in Sept 2011 and will complete in May 2012 then the barricades months is equal to 9 months. The barricades will be adjusted to 9 Months.
7. Consultant has added construction exit/entrance removal quantity of 78 SY to TCP Layout Sheet 84.
8. The note on sheets 14 refers to using a 6" HAMC instead of 6 " Lime treated subgrade in areas where it is necessary to expedite the construction of the proposed pavement.
9. Two Signs, one each at the south and north end of the project on Harry Wurzbach.
10. The Narrative has been revised to coincide with TCP Phasing.
11. No, Units of Measure for Item 132 2001 Embankment is CY.
12. The only proposed median will be located at the north end limits of within the project to tie in to existing median. Sheet 13 has been revised to show raised median detail.
13. There a no wheel chair ramps in the median..

#### COSA Comment

1. Revise Port of San Antonio Verbiage to COSA on SP 006-030-(2)-CoSA .

#### ATTACHMENTS:

1. Spec Item Special Provision 006-030-(2)—CoSA
2. Specs General Notes (Sheet D)
3. PDF copy of the Contract Time Determination Schedule
4. Plan sheet 13, Typical Sections
5. Plans General Notes (Sheets C thru F)
6. Plan Sheet 37 TCP Narrative and General Notes
7. Plan Sheet 84 TCP/SW3P Layout Phase 2 Stage 2
8. Plan Sheet (Sheet 240-261)Plan and Profile Sheets
9. Plan Sheet (Sheet 215) Signing and Pavement Marking Layout

END OF ADDENDUM No. 4



**ADDENDUM REVIEWED & APPROVED BY:**

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CIMS Project Manager

Date

**NOTICE TO PLANHOLDERS:**

Please insert this Addendum into your copy of the Project Construction Documents.

**CITY OF SAN ANTONIO  
DEPARTMENT OF CAPITAL IMPROVEMENTS MANAGEMENT SERVICES  
CONTRACT SERVICES DIVISION**

RECEIPT OF ADDENDUM NUMBER(S) 4 IS HEREBY ACKNOWLEDGED FOR PLANS  
AND SPECIFICATIONS FOR CONSTRUCTION OF: **Fort Sam Transportation Projects**  
**40-00015**

FOR WHICH BIDS WILL BE OPENED ON **Tuesday, August 30, 2011**

THIS ACKNOWLEDGEMENT MUST BE SIGNED AND RETURNED WITH  
THE BID PACKAGE.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name/Title



**SPECIAL PROVISION**  
**006---030 --(2)--CoSA**  
**Control of Materials**

For this project, Item, Item 006, “Control of Materials,” of the Standard Specifications is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

This Item is supplemented by the following:

**6.14. Waste Management Plan.**

**7.0 Soil Reuse and Disposal Requirements.**

Soils from the areas identified in paragraph 3.0 above, may be reused in the project area. At the discretion of the COSA, soils from the areas identified in paragraph 3.0 above may be relocated to COSA fill locations identified on the map in the attachments or at other locations within the area controlled by the COSA.

**7.1 Pre-characterization of Soils.**

Soils to be removed from the project site will be pre-characterized for disposal at a landfill. The Contractor will provide access for the COSA in obtaining any required samples of the soil being removed. Following receipt of the characterization of the soils, the COSA will determine if confirmation samples are required for soils being hauled to the landfill. The Contractor will provide access for the COSA, any regulatory agency or the landfill to obtain the samples. The COSA will provide manifests to the Contractor for use in delivering the soil to the receiving landfill.



can interfere with or discourage swallows from returning to their nests. Prevention of swallow nesting can be performed by one of the following methods:

1. By February 15 begin the removal of any existing mud nests and all other mud placed by swallows for the construction of nests on any portion of the bridge and culverts. The Engineer will inspect the bridges and culverts for nest building activity. If swallows begin nest building, scrape or wash down all nest sites. Perform these activities daily unless the Engineer determines the need to do this work more frequently. Remove nests and mud through October 1 or until bridge and culvert construction operations are completed.
2. By February 15 place a nesting deterrent (which prevents access to the bridge and culvert by swallows) on the entire bridge (except deck and railing) and culverts.

No extension of time or compensation payment will be granted for a delay or suspension of work caused by nesting swallows. This work is subsidiary to the various bid items.

Provide a non-intrusive back-up alarm system on all heavy equipment used in close proximity to if residential areas. This item is subsidiary to various bid items.

**--Item 6--**

Show the stockpile lot and/or sub lot numbers on all tickets for all materials.

**--Item 7--**

The project's total disturbed area is 14.22 AC (68,865 SY). The disturbed area in all project locations and Contractor project specific locations (PSL's), within 1/4 mile of the project limits, will further establish the authorization requirements for storm water discharges. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. Obtain any required authorization from the TCEQ for any PSL's on or off the ROW. When the total area disturbed on the project and PSL's within 1/4 mile of the project exceeds 5 acres, provide a copy of the Contractor NOI for PSL's to the Engineer (to the appropriate MS4 operator when the project is on an off-state system route).

Notify the Engineer of the disturbed acreage within one (1) mile of the project limits. Obtain authorization from the TCEQ for Contractor PSL's for construction support activities on or off ROW.

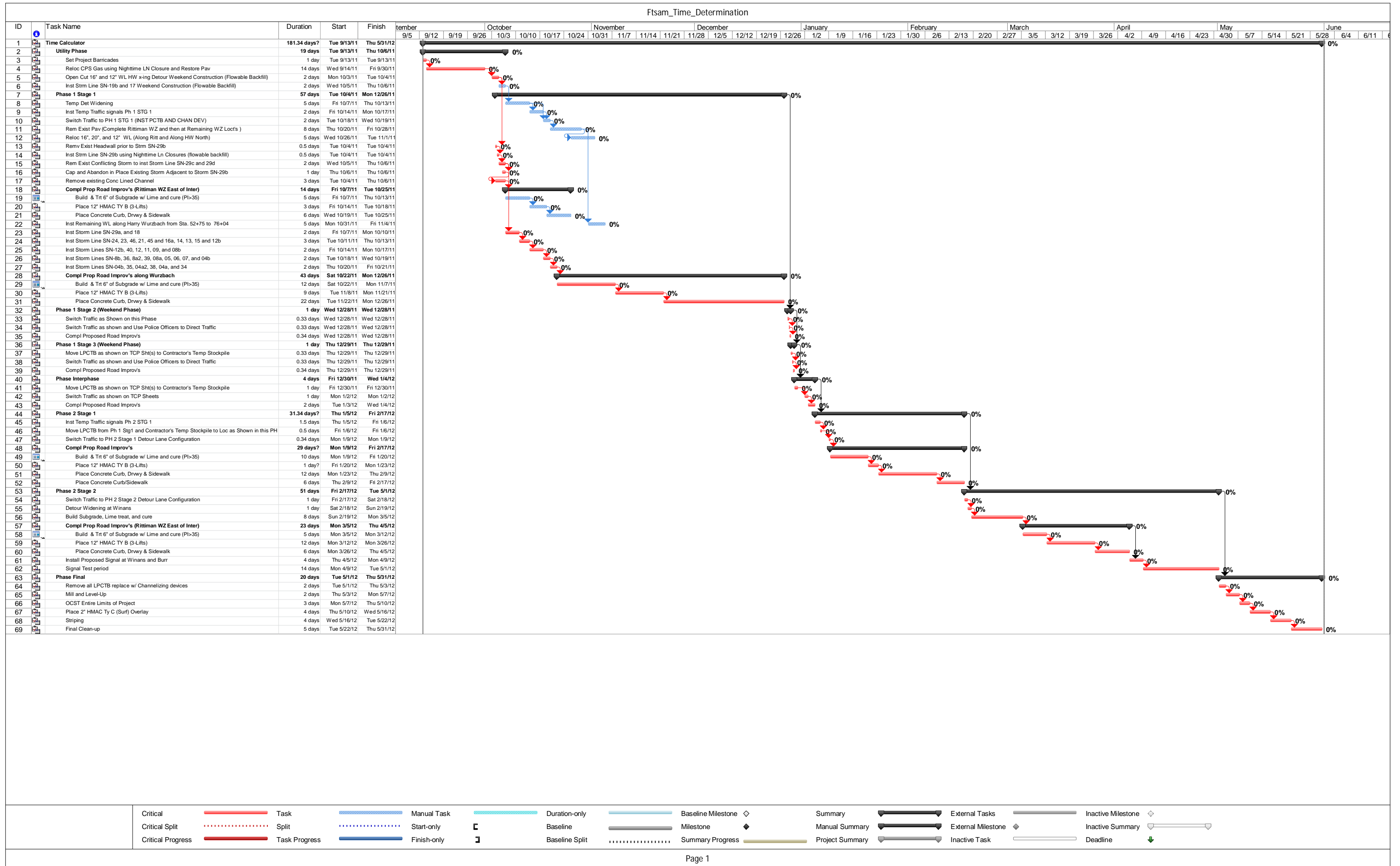
**--Item 8--**

Working days will be computed and charged in accordance with Article 8.3.A. Five (5)-Day work week. The Contractor will be allowed to work nights and weekends only after 48 hour notice and approval by the City.

Locate and reference with station and offset all manholes and valves within the construction area. Each manhole and valve shall be identified by its owner (SAWS, CPS, etc.). No roadwork will begin until this list has been submitted. Gas valves have to be accessible at all times, therefore; temp. CTB, material stock piles, etc. can not be placed over these valves.

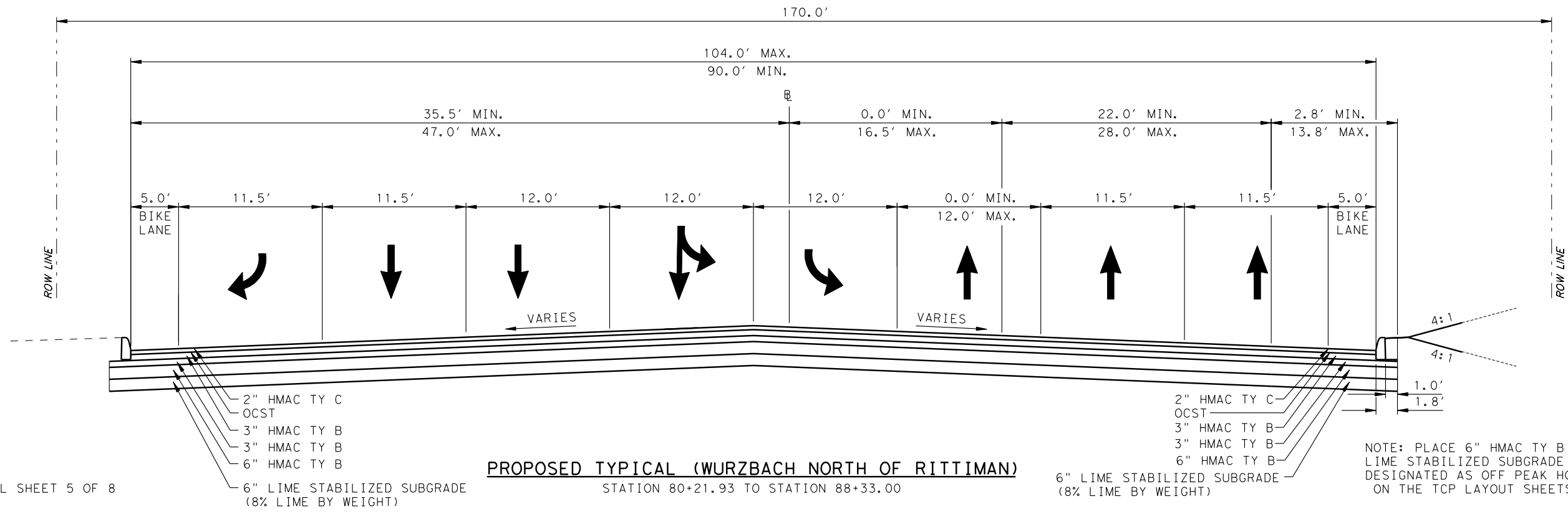
Construct all manholes and valves to final pavement elevations prior to the final mat of ACP. If, between the final elevation adjustment and the final mat of ACP, the manholes and valves are going to be exposed to traffic, place temporary asphalt around the manhole and valve to





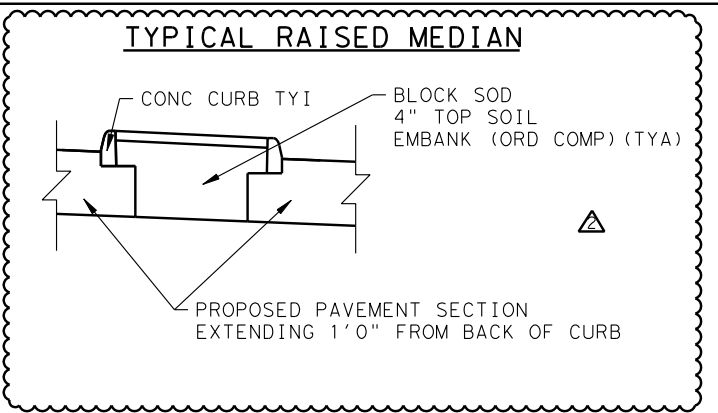
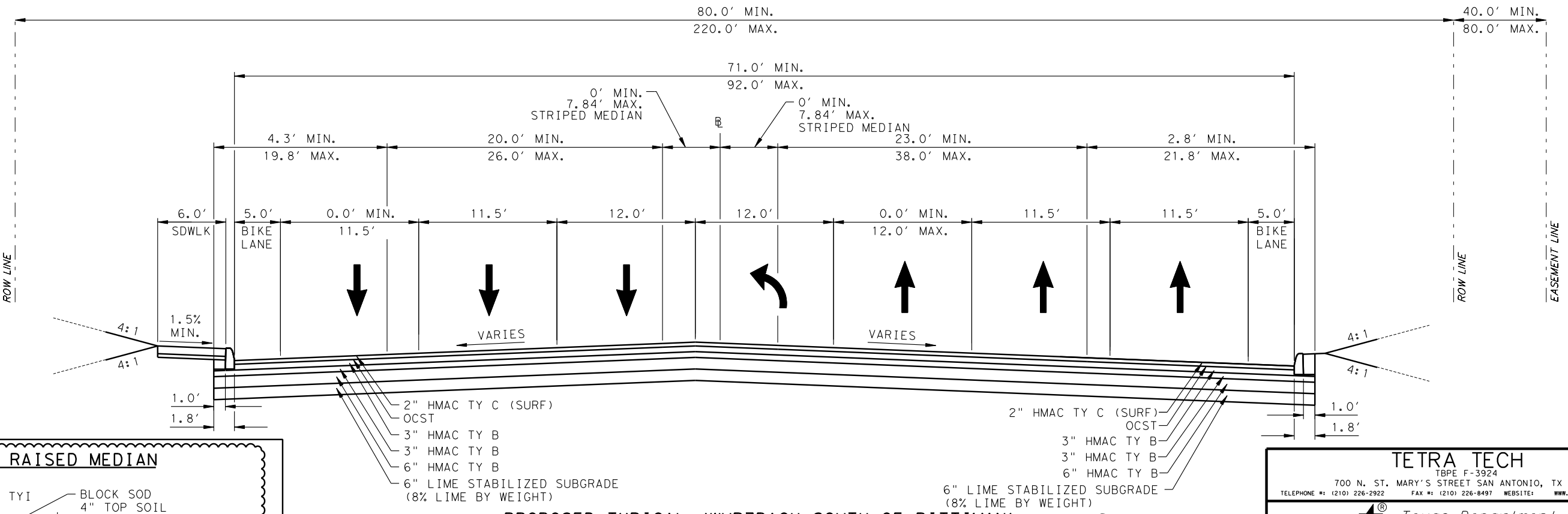


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\*\* SEE TYPICAL SHEET 5 OF 8

**PROPOSED TYPICAL (WURZBACH NORTH OF RITTIMAN)**  
STATION 80+21.93 TO STATION 88+33.00



**PROPOSED TYPICAL (WURZBACH SOUTH OF RITTIMAN)**  
STATION 68+50.00 TO STATION 79+30.10

**ADDENDUM NO. 4**



**TETRA TECH**  
TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRATECH.COM

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**CITY OF SAN ANTONIO**  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
FORT SAM HOUSTON TRANSPORTATION PROJECTS

**TYPICAL SECTIONS**  
HARRY WURZBACH & RITTIMAN RD. INTERSECTION (PROPOSED)

7 OF 8	FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/22/2011
	DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
			SHEET NO.: 13



Project Number:  
County: Bexar  
Highway: CS (Harry Wurzbach)

Sheet:3  
Control: 0915-12-470, etc

The Engineer may order changes in the Traffic Control Plan to accommodate evacuation traffic, and may suspend the work, all or in part, to ensure timely completion of this work. All work to implement changes in the Traffic Control Plan will be paid through existing bid prices or through Item 9.5, Force Account. However, the Department will not entertain any request for delay damages, loss of efficiency that may be attributed to the restriction or suspension of road or lane closures, or to changes in the Traffic Control Plan.

**--Item 5--**

Reference all existing striping and other pavement markings to allow these markings to be re-established. Ensure the markings (lane lines, edge lines, ramp gores, etc.) are in line with signs, TMS arrows, etc. located on overhead sign supports.

Taper ACP placed at curb inlets, traffic inlets and slotted drains.

Prior to letting, bidders may obtain a free computer diskette or a computerized transfer of files (from the Engineer's office) that contains the earthwork information. If copies of the cross-sections in addition to, or instead of, the CD are requested, they will be available at the Engineer's office for borrowing by copying companies at the bidder's expense.

When working near aerial electrical lines or utility poles, comply with Federal, State and local regulations. For electrical lines and poles shown in the plans, if the lines need to be de-energized or if poles need to be braced, contact the electrical company. Work pertaining to de-energizing lines, bracing poles and other protective measures will not be paid by City.

Considering location of existing overhead lines for construction and design purposes. Sleeving of overhead primary lines will be a cost to the contractor. The shielding/sleeving of lines is for reference, not for protection from electrical shock.

The General contractor accepts full responsibility to protect the integrity of CPS Energy poles, Overhead Primary and all associated facilities of the CPS Energy electric system, when working around CPS Energy Overhead facilities during the duration of the Civic Improvement project.

**Prevention of Migratory Bird Nesting**

It is anticipated that migratory birds, a protected group of species, may try to nest on bridges, culverts, vegetation, or gravel substrate, at any time of the year. The preferred nesting season for migratory birds is from February 15 through October 1. When practicable, schedule construction operations outside of the preferred nesting season. Otherwise, nests containing migratory birds must be avoided and no work will be performed in the nesting areas until the young birds have fledged.

**Structures**

Bridge and culvert construction operations can not begin until swallow nesting prevention is implemented, until after October 1 if it's determined that swallow nesting is actively occurring, or until it's determined swallow nests have been abandoned. If the State installed nesting deterrent on the bridges and culverts, maintain the existing nesting deterrent to prevent swallow nesting until October 1 or completion of the bridge and culvert work, whichever occurs earlier. If new nests are built and occupied after the beginning of the work, do not perform work that

Project Number:  
County: Bexar  
Highway: CS (Harry Wurzbach)

Sheet:4  
Control: 0915-12-470, etc

can interfere with or discourage swallows from returning to their nests. Prevention of swallow nesting can be performed by one of the following methods:

1. By February 15 begin the removal of any existing mud nests and all other mud placed by swallows for the construction of nests on any portion of the bridge and culverts. The Engineer will inspect the bridges and culverts for nest building activity. If swallows begin nest building, scrape or wash down all nest sites. Perform these activities daily unless the Engineer determines the need to do this work more frequently. Remove nests and mud through October 1 or until bridge and culvert construction operations are completed.

2. By February 15 place a nesting deterrent (which prevents access to the bridge and culvert by swallows) on the entire bridge (except deck and railing) and culverts.

No extension of time or compensation payment will be granted for a delay or suspension of work caused by nesting swallows. This work is subsidiary to the various bid items.

Provide a non-intrusive back-up alarm system on all heavy equipment used in close proximity to if residential areas. This item is subsidiary to various bid items.

**--Item 6--**

Show the stockpile lot and/or sub lot numbers on all tickets for all materials.

**--Item 7--**

The project's total disturbed area is 14.22 AC (68,865 SY). The disturbed area in all project locations and Contractor project specific locations (PSL's), within 1/4 mile of the project limits, will further establish the authorization requirements for storm water discharges. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. Obtain any required authorization from the TCEQ for any PSL's on or off the ROW. When the total area disturbed on the project and PSL's within 1/4 mile of the project exceeds 5 acres, provide a copy of the Contractor NOI for PSL's to the Engineer (to the appropriate MS4 operator when the project is on an off-state system route).

Notify the Engineer of the disturbed acreage within one (1) mile of the project limits. Obtain authorization from the TCEQ for Contractor PSL's for construction support activities on or off ROW.

**--Item 8--**

Working days will be computed and charged in accordance with Article 8.3.A. Five (5)-Day work week. The Contractor will be allowed to work nights and weekends only after 48 hour notice and approval by the City.

Locate and reference with station and offset all manholes and valves within the construction area. Each manhole and valve shall be identified by its owner (SAWS, CPS, etc.). No roadwork will begin until this list has been submitted. Gas valves have to be accessible at all times, therefore; temp. CTB, material stock piles, etc. can not be placed over these valves.

Construct all manholes and valves to final pavement elevations prior to the final mat of ACP. If, between the final elevation adjustment and the final mat of ACP, the manholes and valves are going to be exposed to traffic, place temporary asphalt around the manhole and valve to

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**Project Number:**  
**County:** Bexar  
**Highway:** CS (Harry Wurzbach)

**Sheet:**5  
**Control:** 0915-12-470, etc

provide a +/- 50:1 taper. The cost of elevation adjustment will be part of the manhole and valve work, and asphalt tapers are part of the ACP work.

**--Item 9--**

When approved, provide uniformed, off-duty law enforcement officers with marked vehicles during work that requires a lane closure. The officer in marked vehicles shall be located as approved to monitor or direct traffic during the closure. The method used to direct traffic at signalized intersections shall be as approved. Additional officers and vehicles may be provided when approved or directed.

Complete the daily tracking form provided by the department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided.

Minimums, scheduling fees, etc. will not be paid; City will consider paying cancellation fees on a case by case basis.

**--Item 100--**

Begin clearing operations after trees and other areas of vegetation to be protected have been identified and approved. Install fencing around features to be protected as shown in the plans or directed. Coordinate all right of way clearing operations with the SW3P.

Trim and remove brush and trees as needed for construction operations. Obtain approval for proposed method of tree and brush trimming and removal. Vertical flailing equipment is not allowed. Treat damaged or cut branches, roots and/or stumps of all oak trees with a commercial tree wound dressing. Disinfect all pruning tools with a solution of 70% alcohol before moving from one tree to another. Unless otherwise approved remove all resulting vegetative debris from the ROW within 24 hours. The Engineer can stop all construction operations if the dressing, cut and removal requirements are not followed.

Remove and reset existing steel pipe railing at sta. 77+00.00 LT to complete proposed construction. This work is subsidiary

**--Item 110--**

Where excavation extends beyond a right of way fence, remove and replace the fence to a comparable condition.

**--Item 160--**

Approximately 264 CY of existing topsoil may be windrowed or stockpiled (as approved) for later use under this Item. Place erosion control measures for the stockpile and/or windrow.

**--Item 162--**

Furnish and place Bermuda grass sod.

In drought conditions do not place sod as vegetation unless directed by the Engineer.

**--Item 166--**

Use a fertilizer with an analysis of 13-13-13 (50% of the total N must be sulfur coated urea) to apply 60 lbs of actual N per acre. This requires 460 lbs of 13-13-13 per acre or .095 lbs per SY of area.

**--Item 168--**

**Project Number:**  
**County:** Bexar  
**Highway:** CS (Harry Wurzbach)

**Sheet:**6  
**Control:** 0915-12-470, etc

Apply vegetative watering as needed to supplement natural rainfall during the vegetation establishment period. Plan quantity of irrigation water is based on the application of a total of 1.3 gal of water each week for each sq. yd. of area that is sodded or seeded. Establishment time is estimated to be 12 weeks for both sod and permanent seed mixes. Temporary seeding will require less time for establishment. Provide a schedule and coordinate watering cycles and rates per cycle with the Engineer. Obtain approval if the quantity of water to be applied is expected to exceed the plan quantity. Adjust the amount of water applied with each cycle and the number of cycles each wk. according to actual site conditions. Drought or other conditions, as determined by the Engineer, may require the application of supplemental irrigation during hours other than normal working hours.

**--Item 169--**

Do not use soil retention blankets made from carpet backing material.

**--Item 247--**

There is no minimum PI requirement for this project.

**--Item 260 & 263--**

Lime trucks may be randomly selected to be re-weighed at public scales. If the weight of the trucks varies by more than 2%, payment will be as determined by the public scales.

**--Item 300--**

The asphalt binder used in the manufacture of all types of hot mix asphalt concrete, shall be PG 64-22.

**--Item 302--**

Previously tested aggregates found to contain excessive quantities of dust (more than 0.5 percent passing the No. 40 sieve) during precoating, stockpiling or hauling operations, may be rejected. Use Test Method Tex-200-F, Part I for testing.

Precoated Aggregate Type PE shall consist of crushed slag, crushed stone or natural limestone rock asphalt.

The Engineer will utilize the Ignition Oven Method (Tex 236-F) for aggregate gradation, with the option of utilizing belt or vacuum extraction gradation in the event the ignition oven malfunctions.

**--Item 305--**

All reclaimable asphalt pavement (RAP) material will be retained by the Contractor.

**--Item 314--**

Use emulsified asphalt in the final flexible base finishing process. The amount used shall be as approved, but not less than 2 percent of the total mixture.

**--Item 316--**

When using latex asphalt, avoid drifting of asphalt onto traffic and adjacent properties.

Asphalt season will be year around, but meet sections 316.4.D.1 through 3.



Ensure that the asphalt for precoating the aggregate and the asphalt used for the surface treatment will not result in a reaction that may adversely affect the bonding of the aggregate and asphalt during the surface treatment operation.

Do not add bag house fines in the production of precoated material.

Clean all concrete curbs, islands, medians, etc. that get coated with asphalt.

**--Item 320--**  
Construct all longitudinal ACP joints adjacent to a travel lane with a joint maker device that will create a 3:1 to 6:1 taper. For placement of 2 inches or more, the device shall provide a maximum ½ inch vertical edge. Taper outside edges (next to the grass) or backfill (shoulder-up) the same day.

Provide a material transfer device capable of providing a continuous flow of material to the paver. The material transfer device will consist of a windrow elevator or better.

**--Item 330--**  
The asphalt plant shall have truck scales as defined in Item 520. Give three weight tickets bearing the date, the truck number, and the gross, net & tare weights to the truck driver, for the State inspector at the spreading and finishing operation. Trucks may be required to weigh on public scales or portable platform scales to verify the weight of the ticket.

Use trap rock or crushed slag as the special aggregate for LRA.

If LRA is stockpiled where it might get contaminated with foreign materials, the bottom of the stockpile can not be used. A set of standard truck scales will be used to determine the quantity of contaminated material that will be deducted. Unless approved, do not stockpile LRA more than 10 days prior to lay-down operations.

The fluxing material shall be either an emulsified combination of asphalt and softening agent added individually (the softening agent may also be an emulsion), or a material meeting the requirements of Item “Asphalt’s, Oils and Emulsions”. The material(s) selected shall be approved.

**--Item 340, 341 Or 344--**  
Table 6, in Item 340, Table 8 in Item 341 and Table 8 in Item 344, Hamburg Wheel Test Requirements tested in accordance with Tex-242-F are changed for PG 64-22 or lower and PG 70-22. Minimum number of passes at 1/2” Rut Depth, Tested at 122 degrees F will be 5,000 and 10,000 respectively.

Design all mixture types using a target laboratory-molded density of 96.5%.

The asphalt plant shall have truck scales as defined in Item 520. Give three weight tickets bearing the date, the truck number, the gross, net & tare weights to the truck driver for the State inspector at the spreading and finishing operation. Trucks may be required to weigh on public scales or portable platform scales to verify the weight of the ticket.

Submit a copy of the Tex 233-F production charts on a weekly basis. At the end of the ACP work, provide all originals.

Crushing of aggregate for hot mix and immediate use for production of the mix is not allowed. Stockpile the aggregate until enough material is available for five days of production unless prior approval is provided. Hold a pre-placement meeting one month prior to the placement of the hot mix.

The main purpose of hot mix cores taken by the State are for payment calculations. If (for quality control purposes) the core information is needed sooner, take additional cores.

Do not use diesel or solvents as asphalt release agents in production, transportation, or construction. A list of approved asphalt release agents is available from the District Laboratory.

No more than one hot mix lot will be open for any specific type of hot mix, unless authorized. After a lot is open and the Contractor gets approval to change plants, the previous lot will be closed and a new lot will be opened. The numbering for the lots produced at the new plant will start with No. 1. If allowed to switch back to the original or previous plant, the next lot from that plant will resume numbering sequentially from the last lot produced by that plant.

Schedule lay-down placement where uneven travel lanes are minimized and eliminated weekly.

If asphalt material is obtained from other than a commercial source presently inspected by City, furnish a Type D structure for the asphalt mix control laboratory for the Engineer's use. Provide a minimum height of 8 feet and a minimum of 400 square feet of gross floor area for permanently located asphalt plants or 200 square feet for a temporary plant. The floor area will be partitioned into a minimum of two rooms, with a minimum of two windows per room. The floor shall have an impervious cover and sufficient strength to support the testing equipment. Portable structures shall be support blocked for stability and shall be tied down.

**Minimum Roadway Placement Temperature**  
**--Item 340, 342, 344, 346, 3127 & 3142--**  
Place mixture when the roadway surface temperature is equal to or higher than listed in Table 1 unless otherwise approved or shown on the plans. Measure the roadway surface temperature with a handheld infrared thermometer. Placement may be allowed to begin prior to the roadway surface reaching the required temperature if conditions are such that the roadway surface will reach the required temperature within 2 hrs. of beginning placement operations. Place mixtures only when weather and moisture conditions of the roadway surface are suitable in the opinion of the Engineer.

Table 1  
Minimum Pavement Surface Temperatures

		Minimum Pavement Surface Temperatures in Degrees Fahrenheit *	
Specification Item Number	High Temperature Binder Grade	Subsurface Layers or Night Paving	Surface Layers Placed in Daylight Operations



		Operations	
Items 340 & 344	PG 64	45	50
	PG 70	55	60
	PG 76	60	60
Items 342 and 346 SS 3127 & SS 3142	PG 76	65	70
	Asphalt Rubber (A-R)	65	70

\* Except for PG 64, may pave at temperatures 10° F lower than the values shown in Table 1 when utilizing a paving process or equipment that eliminates thermal segregation. In these cases, use either an infrared bar attached to the paver, or a hand held thermal camera, or a hand held infrared thermometer operated in accordance with Text Method 244-F to demonstrate that the uncompacted mat has no more than 10° F of thermal segregation.

--Item 354--

Retain planned material.

--Item 401--

A shrinkage compensator is not required for when used for backfilling pipes. Strength of the Flowable Backfill will be verified by the District Laboratory. Field testing is not required, unless deemed necessary.

--Item 420--

Mass concrete will be measured in place.

--Item 421--

Poly-fiber reinforced concrete may be used as an option, with the approval by the Engineer, for riprap, sidewalk, curb/gutter, and mow strip. Use a City approved manufacturer or producer for the poly-fiber. The poly-fibers shall be combined with the concrete in proportions as recommended by the manufacturer. A concrete mix design must be approved by the Engineer.

--Item 432--

In all riprap slopes, provide 3 inch diameter weep holes at 10 foot maximum spacing and backed with loose graded gravel or crushed stone and galvanized hardware cloth.

Match the slope of the Riprap (Mow Strip) to the slope of the adjacent roadway.

--Item 462--

Use concrete aggregate with two sacks of Portland cement per cubic yard for fill between pre-cast boxes.

The following structures shall be pre-cast:  
All Structures are considered to be cast in place unless otherwise approved by engineer.

--Item 465--

Concrete Class B invert shaping is required at all inlets, manholes and junction boxes in order to insure positive flow. The material and work performed for the placement of the inverts shall be considered subsidiary to this item.

Provide for the safety and health of employees and abide by all OSHA Standards and Regulations. All costs incurred for proper management, shall be subsidiary to this Item.

--Item 500--

"Materials on Hand" payments will not be considered in determining percentages for mobilization payments.

--Item 502--

Place standard markings no later than 14 days after surface treatment operations are completed.

When advanced warning flashing arrow panels and/or changeable message sign is specified, have one standby unit in good condition at the job site.

Treat the pavement drop-offs as shown in the TCP.

After written notification, the time frame to provide properly maintained signs and barricades before considered in non-compliance is 48 hours from receipt of the notification.

There are traffic signals at the intersection of Burr Rd./Harry Wurzbach, Winans Dr./Harry Wurzbach, and Rittiman Rd./Harry Wurzbach. Keep the signals in operation except when necessary for specific installation operations.

Moving an existing sign to a temporary location is subsidiary to this Item. Installations with permanent supports at permanent locations will be paid for under the applicable bid item (s).

Mount temporary mailboxes on plastic drum in accordance with Compliant Work Zone Traffic Control Devices, Section K. Mounting and moving the mailbox as needed for the various construction phases is subsidiary to this Item.

Notify the Engineer 5 business days in advance of any temporary or permanent lane, ramp, etc. closures/detours, restrictions to lane widths, alterations to vertical clearances, or modifications to radii. Any other modifications to the roadway that may adversely affect the mobility of oversized/overweight trucks also require 5 business days advance notice to the Engineer. Unless shown in the TCP, no lane, ramp, etc. closures are allowed during special events. At least one lane has to remain open at all times. For all lane closures, provide written closure information by 1:00PM on the business day prior to the closure. For closures on a Monday or following a Holiday, furnish the information the workday prior to the closure. Lane closures will not be allowed if this reporting requirement is not met.

For closures not listed in the TCP; the lane closures are limited to Weekend hours between 10 PM Friday through 5 AM Monday and at least one lane has to remain open at all times.

Avoid placing stockpiles within the roadway's horizontal clear zone. If a stockpile is placed within the clear zone, address in accordance with the TMUTCD.



Do not place barricades, signs, or any other traffic control devices where they interfere with sight distance at driveways or side streets.

In addition to providing a Contractor's Responsible Person and a phone number for emergency contact, have an employee available to respond on the project for emergencies and for taking corrective measures within 2 hours or within a reasonable time frame as specified by the Engineer.

**--Item 529--**  
Class "C" concrete is required for machine extruded curb.

Curb inlets and extensions are based on an exposed curb height of 7 inches. The roadway curb height and shape will be transitioned to the inlet's curb with a 40: 1 taper.

**--Item 531--**

The curb ramp locations shown in the plans have taken into account the geometric features of the intersection, traffic signals, and the pavement markings. If anything changes during construction, the location of curb ramps must be adjusted to ensure they meet TAS requirements.

The contractor shall stop all construction related activities to prevent noise from interfering with funeral services at the fort Sam Houston cemetery as determined by the engineer. Adequate vehicular access to the cemetery facility especially during funeral processions will be provided at all times. Contractor shall coordinate with ft Sam Houston cemetery representatives throughout the construction phasing.

**--Item 585--**  
Ride quality requirements are waived.

**--Item 618--**  
It might be necessary to cut concrete for placement of conduit. Saw cut existing concrete, remove the concrete from the steel reinforcement (bars or fabric) and bend the steel to install the conduit. After the conduit has been placed, bend the steel back to its original position and back-fill the trench with an approved concrete. This work is subsidiary to this Item.

The conduit depth for illumination under the City of San Antonio streets is 36 inches.

Do not use cast iron junction boxes in single slope traffic barriers.

Use materials from Material Producers list as shown on the Construction Division's (CST) web site. Category is "Roadway Illumination and Electrical Supplies."

The polymer concrete barrier box will not be paid for separately, but will be considered subsidiary to ITEM 618, "CONDUIT".

**--Item 624--**  
Legibly imprint the ground box cover with the words "Danger High Voltage" as required by the "Electrical Details" State Standard Sheet(s). In addition, imprint "Traffic Signal", "TMS",

"Illumination", or whatever other system will be housed in the ground box. The ground box locations shown on the plans are approximate and can be adjusted to better fit field conditions when approved.

**--Item 628--**  
Make all arrangements for electrical service, and compliance with local standards and practices for proper installations.

**--Item 644--**  
The wedge anchor system shown on State Standard Sheet SMD (TWT) are not allowed.

**--Item 647--**  
Note: Contractor to provide engineering drawings and calculations for design of large sign and foundation relocation. Complete cost including labor, materials, equipment and professional engineering drawings (signed and sealed by professional engineer) will be included in the cost of this item. Refer to Signing and Pavement Marking Sheet 215 for location of existing signs. The Engineer shall provide the new location of the sign.

**--Item 658--**  
CTB reflectors will not be paid for directly but will be considered subsidiary to the barrier.

**--Item 666 & 8251--**  
If TY II material is used (vs. an acrylic or epoxy) as the sealer for the TY I markings, place the TY II a minimum of 14 calendar days (to provide adequate curing) before placing the TY I markings.

**--Item 672--**  
Place all adhesive material directly from the heated dispenser to the pavement. Do not use portable or non-heated containers. Use adhesive of sufficient thickness so that when the marker is pressed into the adhesive, 1/8" or more adhesive will remain under 100% of the marker. The adhesive should extend not less than 1/2" but not more than 1 1/2" beyond the perimeter of the marker.

**--Item 677--**  
Obtain approval before using the mechanical method for the elimination of existing thermoplastic pavement markings.

**--Item 680--**  
Furnish and install all required materials and equipment necessary for the complete and operating traffic signal installation at the following intersections:  
Burr Rd./Harry Wurzbach, Winans Dr./Harry Wurzbach, and Rittiman Rd./Harry Wurzbach.

The locations shown on the plans for signal pole foundations, controller foundations, conduit and other items may be adjusted to better fit field conditions as approved.

High pressure sodium lamps shall meet ANSI C78 requirements and shall be the type that extinguishes at the end of usable lamp life and remains extinguished without cycling. 400 watt lamps shall contain less that 4.0 MG of mercury. 250 watt lamps shall contain less than 3.0 MG of mercury. Lamps shall be lead free. Lamps shall pass the Federal Toxic Characteristic Leachate Producure (TCLP). Lamp examples: OSRAM-Sylvania LU400/ECO Plus.



**Project Number:**  
**County:** Bexar  
**Highway:** CS (Harry Wurzbach)

**Sheet:13**  
**Control: 0915-12-470, etc**

Demonstrate that the field wiring is properly installed, install the controller assembly, connect the wiring and turn on the controller.

--Item 682--

Provide all signal heads from the same manufacturer. Pedestrian signals may be by a different manufacturer than the vehicle signal heads.

Cover all signal faces until placed in operation.

All pedestrian signal faces shall be single section LED Type. Die cast polycarbonate is acceptable in lieu of die cast aluminum. All mounting attachments shall be constructed of steel pipe and mounted as shown on the plans.

For all proposed mast arm pole assemblies, use mounting bracket assembly Option "C" as shown on the State Standard Sheet(s) "Single Mast Arm Assemblies".

--Item 684--

Provide all signal heads from the same manufacturer. Pedestrian signals may be by a different manufacturer than the vehicle signal heads.

Cover all signal faces until placed in operation.

All pedestrian signal faces shall be single section LED Type. Die cast polycarbonate is acceptable in lieu of die cast aluminum. All mounting attachments shall be constructed of steel pipe and mounted as shown on the plans.

For all proposed mast arm pole assemblies, use mounting bracket assembly Option "C" as shown on the State Standard Sheet(s) "Single Mast Arm Assemblies".

--Item 684--

Provide an extra 10' for each cable terminating in the controller cabinet. All cables shall be continuous without splices from terminal point to terminal point. All proposed signal cable shall be #12 AWG stranded copper.

--Item 686 & 687--

Provide all signal poles from the same manufacturer. Pedestrian poles may be from a different manufacturer.

--Item 688--

The sealant used must be approved.

The pedestrian push button shall be raised or flush and a minimum of 2 inches in the smallest dimension. The force to activate the control shall be no greater than 5 lb/f. the button placement has to be coordinated with the concrete pad to access the button. The concrete pad (if required) shall be paid separately.

The pedestrian push button shall be wired with a 2/C#14 lop detector cable in lieu of a #12 A.W. G. XHHW wire.

--Item 730--

Spot mow and hand trim the right of way, including newly seeded or sodded areas, when vegetation reaches a height of 16" or when directed. Removal of brush sprouts growing within

**Project Number:**  
**County:** Bexar  
**Highway:** CS (Harry Wurzbach)

**Sheet:14**  
**Control:** 0915-12-470, etc

guardrail, concrete barriers or at other locations where mowing or hand trimming is done within the limits of construction is required and subsidiary to this item. Moving may be required more often in newly sodded or seeded areas than in other parts of the project because of the supplemental irrigation these areas receive and the resulting weed growth. Coordinate mowing to avoid rutting or compaction of the soil when mowing where supplemental irrigation is being used. Use mowing equipment that will not adversely affect soil retention blankets or mulches that have been applied. Work performed under this item does not replace the mowing required when placing permanent seeding in an area that has established temporary seeding as described in Article 164-3, Construction.

--Item 6007--

All existing signal equipment with the exception of the signal controller and equipment become the property of the Contractor and disposed of in accordance with the specifications. Deliver the controller and related equipment to the Signal Shop, located at 233 S. Cherry Street, San Antonio, Texas or to the Area Office as directed.



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I. SEQUENCE OF CONSTRUCTION

THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION OPERATIONS ON THE ROADWAYS AND INTERSECTIONS DURING REGULAR DAYLIGHT HOURS EXCEPT FOR WORK DEFINED BY THE PLANS OR THE ENGINEER TO REQUIRE ROAD CLOSURES WILL BE DONE DURING WEEKEND CONSTRUCTION HOURS.

WEEKEND CONSTRUCTION HOURS WILL BE FROM FRIDAY 10:00 PM TO MONDAY 5:00 AM.

THE CONTRACTOR'S PARTICULAR ATTENTION IS DIRECTED TO REQUIREMENTS OF ITEM 7, "LEGAL RELATIONS AND RESPONSIBILITIES", OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES, 2004.

IT IS THE CONTRACTORS RESPONSIBILITY TO IDENTIFY AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION OF EACH PHASE.

AT LOCATIONS WHERE BARRIER IS NOT INDICATED AT THE EDGE OF EXCAVATION, ADJACENT TO THE TRAVELED ROADWAY, A MINIMUM 3:1 SIDE SLOPE SHALL BE PLACED AT THE END OF EACH WORKDAY. THE MATERIAL USED SHALL BE TEMPORARY AND SHALL BE SUITABLY COMPACTED FOR A VEHICLE RECOVERY SLOPE.

THE CONTRACTOR SHALL STOP ALL CONSTRUCTION RELATED ACTIVITIES TO PREVENT NOISE FROM INTERFERING WITH FUNERAL SERVICES AT THE FORT SAM HOUSTON CEMETERY AS DETERMINED BY THE ENGINEER. ADEQUATE VEHICULAR ACCESS TO THE CEMETERY FACILITY ESPECIALLY DURING FUNERAL PROCESSIONS WILL BE PROVIDED AT ALL TIMES. CONTRACTOR SHALL COORDINATE WITH FT SAM HOUSTON CEMETERY REPRESENTATIVES THROUGHOUT THE CONSTRUCTION PHASING.

PRIOR TO THE BEGINNING OF EACH PHASE AND STAGE, PLACE ALL TRAFFIC CONTROL DEVICES AND/OR WORK ZONE PAVEMENT MARKINGS AS SHOWN AND/OR AS GIVEN BY THE ENGINEER. PROJECT BARRICADES WILL BE INSTALLED REFERENCING TXDOT STANDARD BC SHEETS. CONSTRUCTION WILL NOT BEGIN UNTIL APPROVAL IS GIVEN BY THE ENGINEER.

PORTABLE MESSAGE BOARDS WILL BE USED AS DIRECTED BY THE ENGINEER TO NOTIFY THE PUBLIC OF UPCOMING CONSTRUCTION ACTIVITES.

PROVIDE UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICERS WITH MARKED VEHICLES DURING WORK THAT REQUIRES A LANE CLOSURE. THE OFFICER IN MARKED VEHICLES SHALL BE LOCATED AS APPROVED TO MONITOR OR DIRECT TRAFFIC DURING THE CLOSURE. THE METHOD USED TO DIRECT TRAFFIC AT SIGNALIZED INTERSECTIONS SHALL BE AS APPROVED. ADDITIONAL OFFICERS AND VEHICLES MAY BE PROVIDED WHEN APPROVED OR DIRECTED. POLICE OFFICERS WILL BE REQUESTED BY THE ENGINEER TO DIRECT TRAFFIC AS NECESSARY.

UTILITY PHASE:

COMPLETE PROPOSED GAS RELOCATION DURING WEEKEND CONSTRUCTION HOURS USING DAILY LANE CLOSURES AND REFERENCING TRAFFIC CONTROL SHEET STANDRDS TCP (2-1)-98 AND TCP (2-3)-03. STORM SEWER LINES (SN-17 AND SN-19B) AND WATER LINE CROSSINGS (16" AND 20") WITHIN THE PROPOSED HARRY WURZBACH PHASE 1 STAGE 1 DETOUR WILL BE COMPLETED SIMULTANIOUSLY WITH THE PROPOSED GAS LANE CLOSURE WORK PRIOR TO COMMENCING PHASE 1 STAGE 1. RESTORE PAVEMENT USING FLOWABLE FILL, PLACE STEEL PLATES, AND OPEN TO TRAFFIC

PHASE 1 STAGE 1:

PRIOR TO THE BEGINNING OF THIS PHASE, PLACE ALL TEMPORARY TRAFFIC SIGNALS AT BURR RD, WINANS RD, AND RITTIMAN RD AS SHOWN ON THE PLANS. CONSTRUCTION WILL NOT BEGIN UNTIL APPROVAL IS GIVEN BY THE ENGINEER.

OBLITERATE A PORTION OF THE EXISTING CONCRETE ISLAND AT RITTIMAN RD AND CONSTRUCT TEMPORARY PAVEMENT IN ITS PLACE AS SHOWN ON THE PLAN(S).

CONSTRUCT TEMPORARY WIDENING ALONG RIGHT SIDE OF EXISTING EOP OF HARRY WURZBACH FROM STA 55+97.35 TO STA 77+03.79, FROM STA 77+66.30 TO STA 16+76.54 (RITT ALIGN), AND FROM STA 80+38.52 TO STA 87+27.08 AS SHOWN IN THE PLAN(S).

CONSTRUCT TEMPORARY WIDENING ON HARRY WURZBACH AT EXISTING MEDIAN FROM STA 74+37.88 RT TO STA 77+19.92 RT, FROM 80+23.06 RT TO STA 83+52.91 RT, 83+96.26 RT TO STA 88+88.35 LT, STA 89+21.55 LT TO STA 94+04.36 LT, AND FROM STA 94+35.49 TO STA 96+07.12 LT AS SHOWN IN THE PLAN(S).

CONSTRUCT TEMPORARY WIDENING ALONG THE RIGHT SIDE OF EXISTING EOP OF RITTIMAN RD FROM STA 17+38.36 RT TO STA 22+39.62 RT AS SHOWN IN THE PLAN(S).

DETOUR TRAFFIC ON HARRY WURZBACH AND ON RITTIMAN RD AS SHOWN ON THE PLAN(S) FOR THE CONSTRUCTION OF THE ROAD WORK AND UTILITIES.

PRIOR TO CONSTRUCTION OF THE STORM SEWER, RELOCATE EXISTING 16" WATER LINE ALONG RITTIMAN RD FROM STA 21+49.70 TO THE COMPLETED UTILITY PHASE LIMITS AND 20" WATER LINE FROM STA 15+99.29 TO STA 14+34.63.

COMPLETE WATER LINE WITHIN THE LIMITS OF CONSTRUCTION TCP PHASE 1 STAGE 1 CONSTRUCTIO WORKZONE.

DURING WEEKEND CONSTRUCTION HOURS CLOSE WB APPROACH AND EB DEPARTURE OF THE RITTIMAN HARRY WURZBACH INTERSECTION TO ALLOW OPEN CUT CONSTRUCTION OF STORM SEWER LINE SN-29B ACROSS RITTIMAN. PRIOR TO INSTALLATION OF PROPOSED STORM SEWER LINE CONTACT AT&T TO CONCRETE ENCASE EXISTING FACILITIES. CONTRACTOR TO SCHEDULE CONRETE ENCASEMENT WITH AT&T A MINIMUM OF 3 WEEKS PRIOR TO INSTALLATION. TRAFFIC WILL BE DETOUR AS SHOWN ON ROAD CLOSURE DETOUR SHEET UNDER TCP PHASE 1 STAGE 1 EASTBOUND AND ESTBOUND RITTIMAN RD UTILITY TRENCH CONSTRUCTION DETOUR. REMOVE EXISTING CULVERT HEADWALL AT STA 17+76.19, 43.35' RT AND PORTION OF EXISTING CULVERT AND INSTALL STORM SEWER LINE SN-29B. RESTORE PAVEMENT USING FLOWABLE FILL AND STEEL PLATES AND OPEN BACK UP TO TRAFFIC.

PRIOR TO INSTALLATION OF PROPOSED STORM SEWER LINE SN-28 CONTACT AT&T TO CONCRETE ENCASE EXISTING FACILITIES. CONTRACTOR TO SCHEDULE CONRETE ENCASEMENT WITH AT&T A MINIMUM OF 3 WEEKS PRIOR TO INSTALLATION.

PRIOR TO INSTALLATION OF PROPOSED STORM SEWER LINE CONTACT AT&T TO CONCRETE ENCASE EXISTING FACILITIES. CONTRACTOR TO SCHEDULE CONRETE ENCASEMENT WITH AT&T A MINIMUM OF 3 WEEKS PRIOR TO INSTALLATION. INSTALL LINE SN-29C AND SN-2BD TO MAINTAIN TEMPORARY DRAINAGE. CAP THE EXISTING STRUCTURE (LOCATED AT APPROXIMATELY STA. 17+76.19, 43.35' RT) AT BOTH ENDS.

INSTALL STORM SEWER LINES SN-29A, SN-18 AND THE REMAINING PORTIONS OF SN-19B AND SN-17 (SEE UTILITY PHASE).

INSTALL STORM SEWER LINES SN-45, SN-16B, SN-17B, SN-16A, SN-15, SN-14, SN-13, SN-12B, SN-40, SN-12, SN-11, SN-9, SN-08B, SN-36, SN-08A2, SN-39, SN-08A, SN-07, SN-06, SN-05, SN-04B, SN-35, SN-04A2, SN-38, SN-04A, SN-03, SN-01, SN-34, SN-43, SN-23, SN-24, AND SN-46. LOCAL RESIDENTIAL STREETS WILL BE CLOSED DURING THE CONSTRUCTION OF THE STORM SEWER AND ROAD IMPROVEMENTS AND TRAFFIC WILL BE DETOURED AS SHOWN IN ROAD CLOSURE DETOUR SHEETS FOR PHASE 1 STAGE 1.

INSTALL STORM SEWER LINE SN-21 AND TEMPORALLY CAP INLET CI 21, CI 20, AND SN-21 AS SHOWN IN THE PLANS UNTIL PHASE 2 CONSTRUCTION.

DETOUR TRAFFIC DURING WEEKEND CONSTRUCTION HOURS AS SHOWN UNDER THE ROAD CLOSURE DETOUR TCP PHASE 1 STAGE 1 SHEET(S) TO CONSTRUCT STORM SEWER AND PROPOSED ROADWAY AT MORNINGSIDE DR, WILTSHIRE AVE, AND CANTERBURY HILL ST. ADJACENT STREETS WILL NOT BE ALLOWED TO BE CLOSE SIMULTANEOUSLY BUT ALTERNATING STREET CLOSURES WILL BE ALLOWED.

PHASE 1 STAGE 2

THIS PHASE IS TO BE COMPLETED DURING WEEKEND CONSTRUCTION HOURS CONSTRUCTION.

DETOUR TRAFFIC AS SHOWN ON TCP/SW3P LAYOUT PHASE 1 STAGE 2 SHEET(S) AND ROAD CLOSURE TCP PHASE 1 STAGE 2 SHEET(S) AND CONSTRUCT FULL DEPTH PAVEMENT.

PHASE 1 STAGE 3

THIS PHASE IS TO BE COMPLETED DURING WEEKEND CONSTRUCTION HOURS CONSTRUCTION.

DETOUR TRAFFIC AS SHOWN ON TCP/SW3P LAYOUT PHASE 1 STAGE 3 SHEET(S) AND ROAD CLOSURE TCP PHASE 1 STAGE 3 SHEET(S) AND CONSTRUCT FULL DEPTH PAVEMENT.

INTERPHASE TRAFFIC SWITCH

DETOUR TRAFFIC AS SHOWN ON TCP/SW3P LAYOUT PHASE INTERPHASE SHEET(S) AND CONSTRUCT FULL DEPTH PAVEMENT.

ADJUST TEMPORARY TRAFFIC SIGNAL HEADS ACCORDINGLY.

PHASE 2 STAGE 1

PRIOR TO BEGINNING OF PHASE II, ADJUST TEMPORARY TRAFFIC SIGNALS AT BURR RD AND WINANS DR. AS SHOWN ON THE PLANS.

AT RITTIMAN RD, THE PHASE 1 TEMPORARY TRAFFIC SIGNAL SHALL BE LEFT IN PLACE AND UTILIZED UP UNTIL THE BEGINNING OF PHASE 2. AFTER THE COMPLETION OF THE PHASE 2 STAGE 1 TRAFFIC SWITCH ALONG RITTIMAN RD, THE CONTRACTOR SHALL INSTALL THE PHASE 2 TEMPORARY TRAFFIC SIGNAL AS SHOWN ON THE PLANS. HOWEVER, IT SHOULD BE NOTED THAT THE PHASE 2 TEMPOARY TRAFFIC SIGNAL AT RITTIMAN RD WILL REQUIRE PORTIONS OF THE PERMANENT TRAFFIC SIGNAL TO BE INSTALLED AND OPERATIONAL; THIS WORK SHALL BE COMPLETED DURING PHASE 1.

DETOUR TRAFFIC AND CONSTRUCT ROADWAY ON HARRY WURZBACH, BURR RD, WINANS RD AND RITTIMAN RD AS SHOWN ON THE PLANS.

PRIOR TO INSTALLATION OF STORM SEWER RELOCATE AT&T AND CONCRETE ENCASE DUCTS. CONTRACTOR TO SCHEDULE RELOCATION WITH AT&T A MINIMUM OF 3 WEEKS PRIOR TO INSTALLATION. INSTALL STORM SEWER LINE SN-20, SN-44, AND SN-19A AS SHOWN IN THE PLAN(S)

OBLITERATE THE EXISTING CONCRETE ISLAND AT WINANS RD AND CONSTRUCT TEMPORARY PAVEMENT IN ITS PLACE AS SHOWN ON THE PLAN(S).

CONSTRUCT TEMPORARY WIDENING ON WINANS RD FROM STA 11+87.59 RT TO STA 15+97.75 RT AND FROM STA 12+93.11 LT TO STA 15+95.97 LT AS SHOWN IN THE PLAN(S). DETOUR TRAFFIC AND CONSTRUCT ROADWAY ON WINANS RD AS SHOWN ON THE PLAN(S).

PHASE 2 STAGE 2

DETOUR TRAFFIC AND CONSTRUCT ROADWAY ON BURR RD AND WINANS RD WHILE THE DETOUR IS MAINTAINED ON HARRY WURZBACH PER PREVIOUS PHASE.

PHASE 3 - FINAL SURFACE

UPON COMPLETION OF PHASE 2, THE CONTRACTOR MAY PROCEED WITH THIS PHASE. PRIOR TO THE BEGINNING OF THIS PHASE, PLACE ALL TRAFFIC CONTROL DEVICES AND WORK ZONE PAVEMENT MARKINGS AS SHOWN AND/OR AS GIVEN BY THE ENGINEER. CONSTRUCTION WILL NOT BEGIN UNTIL APPROVAL IS GIVEN BY THE ENGINEER.

FINAL STAGE

PLACE FINAL OVERLAY AND PERMANENT PAVEMENT MARKINGS, MARKERS, AND SIGNS AND PROJECT LIMITS UTILIZING TCP (3-1)-98.

CONSTRUCT THE FINAL SURFACE AND FINAL PAVEMENT MARKINGS THROUGHOUT THE ENTIRE PROJECT LIMITS AS SHOWN ON PLANS. ERECT PERMANENT SIGNS.

II. FINAL CLEAN UP

UPON COMPLETION OF THE WORK AND BEFORE FINAL ACCEPTANCE IS MADE, THE PROJECT WILL BE THOROUGHLY CLEANED OF ALL CONSTRUCTION MATERIALS AND ALL STOCKPILE LOCATIONS.

UPON COMPLETION OF THE WORK AND BEFORE FINAL ACCEPTANCE IS MADE, SHAPE AND FINISH SUCH PORTIONS OF THE RIGHT-OF-WAY WHICH MAY HAVE BEEN DISTRIBUTED IN MAKING THE PROVISION FOR TRAFFIC. LEAVE THE ENTIRE RIGHT-OF-WAY IN A SMOOTH, NEAT AND SIGHTLY CONDITION.

III. PAYMENT

ALL BARRICADES, SIGNS, AND OTHER ADDITIONAL SIGNS AND BARRICADES AS DIRECTED BY THE ENGINEER WILL NOT BE PAID FOR DIRECTLY BUT WILL BE SUBSIDIARY TO ITEM 502 "BARRICADES, SIGNS, AND TRAFFIC HANDLING."

ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE PAID FOR UNDER ITEM 506 "TEMPORARY EROSION, SEDIMENT, AND ENVIRONMENTAL CONTROLS."

ALL NECESSARY FLAGGERS AND APPROPRIATE SIGNING TO SAFELY GUIDE TRAFFIC WILL NOT BE PAID FOR DIRECTLY BUT BE SUBSIDIARY TO ITEM 502 "BARRICADES, SIGNS AND TRAFFIC HANDLING."

ALL WORK AND MATERIALS REQUIRED FOR WORK ZONE PAVEMENT MARKINGS WILL BE PAID FOR UNDER ITEM 662 "WORK ZONE PAVEMENT MARKINGS."

ALL OTHER WORK AND MATERIALS REQUIRED BY THESE PROVISIONS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS OF THE CONTACT, UNLESS OTHERWISE INDICATED IN THE PLANS OF SPECIFICATIONS.

IV. GENERAL NOTES

1) REFER TO THE BARRICADES, SIGNS & TRAFFIC HANDLING SHEET FOR APPLICABLE QUANTITIES, NOTES, AND OTHER INFORMATION.

2) REFER TO BARRICADE DETAILS SHEET FOR SIGN MOUNTING REQUIREMENTS.

3) SIGNS CANNOT BE MOUNTED ON BARRICADES.


4) ALL EXISTING TRAFFIC CONTROL SIGNS SHOULD BE MOUNTED ON PORTABLE STANDS AND ADJUSTED AS NECESSARY DURING THE PROJECT AND SHOULD BE SUBSIDIARY TO ITEM 502 - BARRICADES.

5) ALL TRAFFIC CONTROL WORK SHOULD BE IN ACCORDANCE WITH THE LATEST VERSION OF THE TEXAS MANUAL OF UNIFORM TRAFFIC.

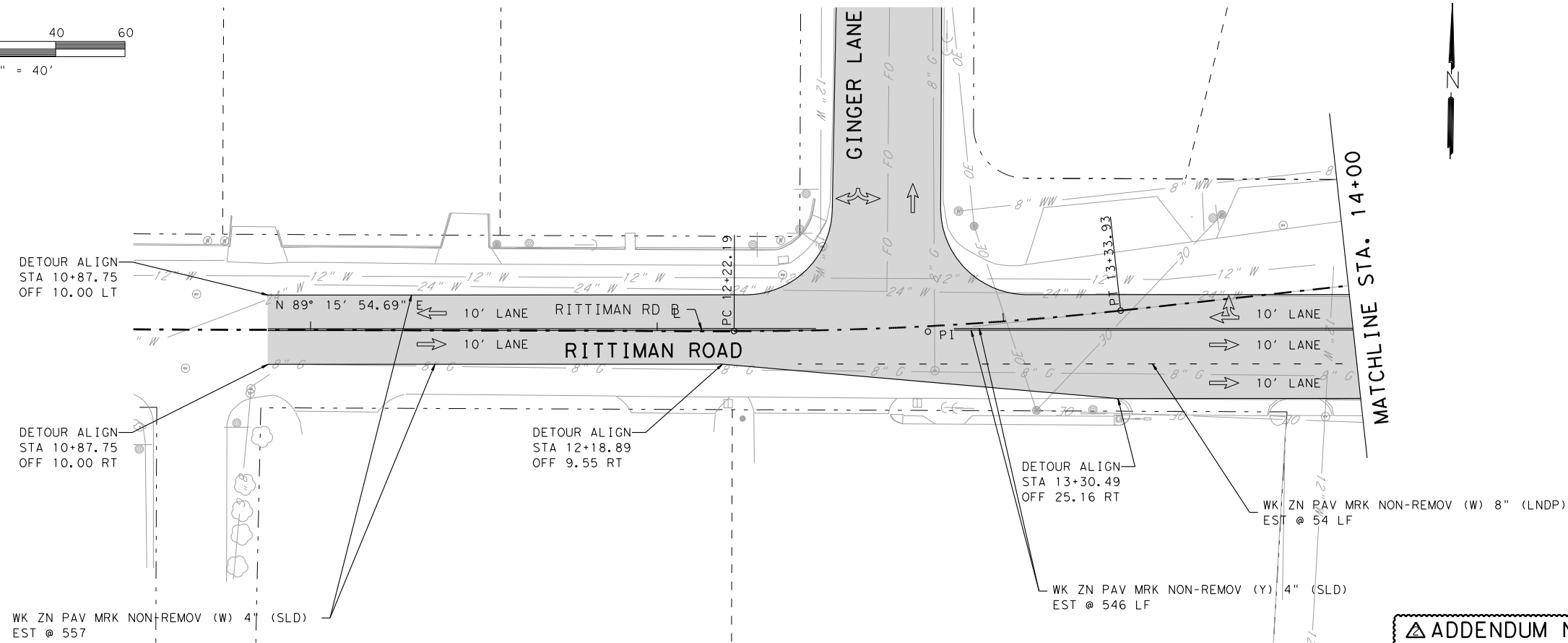
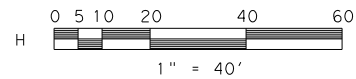
6) REFERENCE TXDOT TCP(2-3)-03 AND (2-5)-03 FOR WORK ZONE SIGN AND DELINEATION



△ ADDENDUM NO. 4  
(REPLACED SHEET)

TETRA TECH TBPE F-3924 700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205 TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRATECH.COM		
 <i>Texas Department of Transportation</i>		
CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT FORT SAM HOUSTON TRANSPORTATION PROJECTS		
TCP NARRATIVE AND GENERAL NOTES		
FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/21/2011
DRWN. BY: <b>M.G.</b>	DSGN. BY: <b>A.G.</b>	CHKD. BY: <b>A.G.</b> SHEET NO.: 37



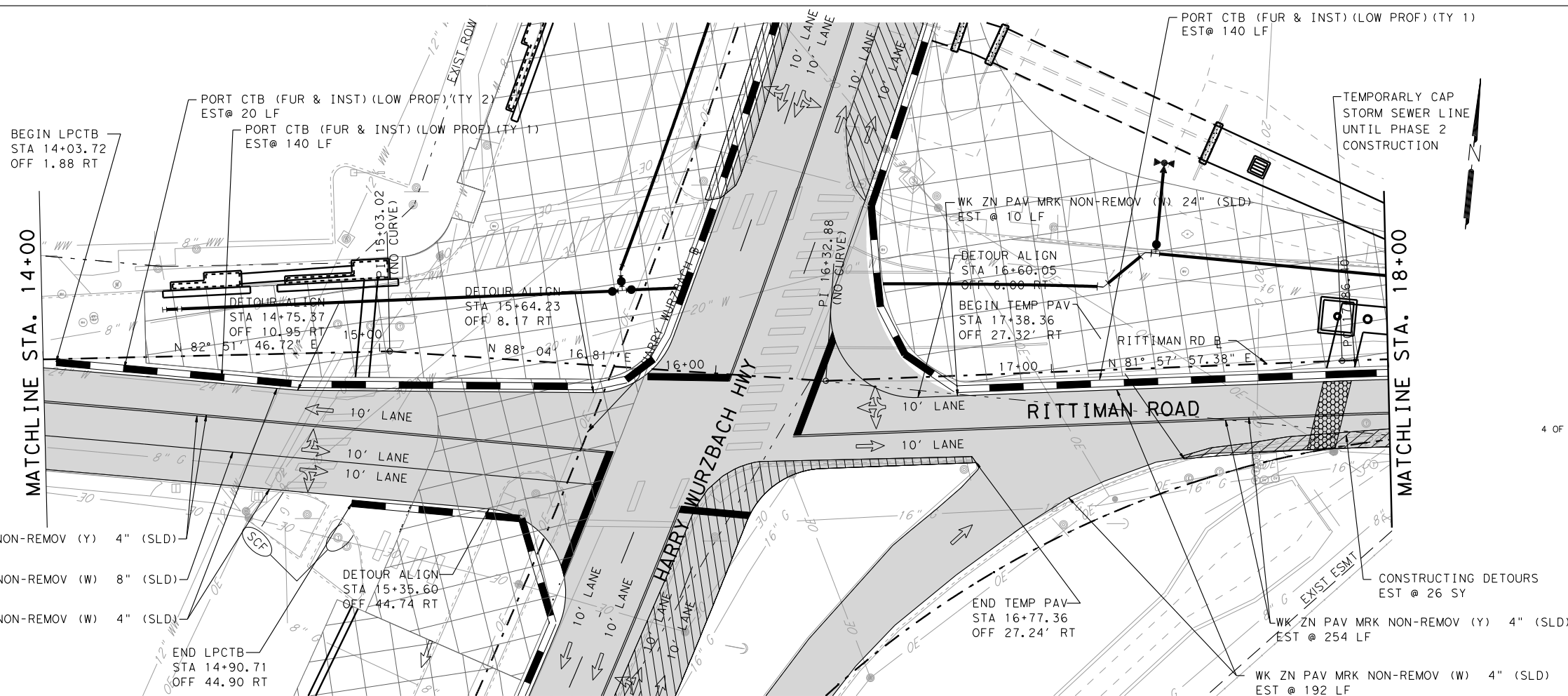


ADDENDUM NO. 4

- LEGEND**
- DETOUR
  - EXIST PAV MK TO BE REMOVED
  - EXIST PAV MK TO REMAIN
  - WK ZN PAV MK REMOV/NON-REMOV
  - DIRECTION OF TRAVEL
  - CHANNELLIZING DEVICES (VP'S, BARRELS, CONES, ETC.)
  - SIGN
  - BARRICADES (TYPE III)
  - PORTABLE TRAFFIC BARRIER
  - LIMITS OF EARTHWORK
  - WEEKEND CONSTRUCTION
  - TEMPORARY SEDMNT CONT FENCE
  - SANDBAGS
  - CONSTRUCTION EXIT
  - CONSTRUCTION PERIMETER FENCE
  - TEMPORARY PAVEMENT
- NOTE: SEE TCP NARRATIVE & GENERAL NOTES FOR ADDITIONAL INFORMATION



NOTE: REFER TO CPS GAS UTILITY PHASE PLANS



SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
BLOCK SODDING	SY	0.00
VEGETATIVE WATERING	MG	0.00
CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	0.00
CONSTRUCTION EXITS (REMOVE)	SY	78.00
SANDBAGS FOR EROSION CONTROL (18")	LF	0.00
TEMPORARY SEDIMENT CONTROL FENCE	LF	0.00
CONSTRUCTING DETOURS	SY	0.00
PORT CTB (FUR & INST)(LOW PROF)(TY 1)	LF	0.00
PORT CTB (FUR & INST)(LOW PROF)(TY 2)	LF	0.00
PORT CTB (MOVE)(LOW PROF)(TY 1)	LF	0.00
PORT CTB (MOVE)(LOW PROF)(TY 2)	LF	0.00
PORT CTB (REMOVE)(LOW PROF)(TY 1)	LF	0.00
PORT CTB (REMOVE)(LOW PROF)(TY 2)	LF	0.00
WK ZN PAV MK NON-REMOV (W) 4" (BRK)	LF	0.00
WK ZN PAV MK NON-REMOV (W) 4" (SLD)	LF	582.00
WK ZN PAV MK NON-REMOV (W) 8" (LNDP)	LF	0.00
WK ZN PAV MK NON-REMOV (W) 8" (SLD)	LF	0.00
WK ZN PAV MK NON-REMOV (W) 24" (SLD)	LF	10.00
WK ZN PAV MK NON-REMOV (Y) 4" (SLD)	LF	540.00
ELIM EXT PAV MK & MRKS (4")	LF	1,122.00
ELIM EXT PAV MK & MRKS (8")	LF	0.00
ELIM EXT PAV MK & MRKS (24")	LF	10.00

4 OF 5

**TETRA TECH**  
TBE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM

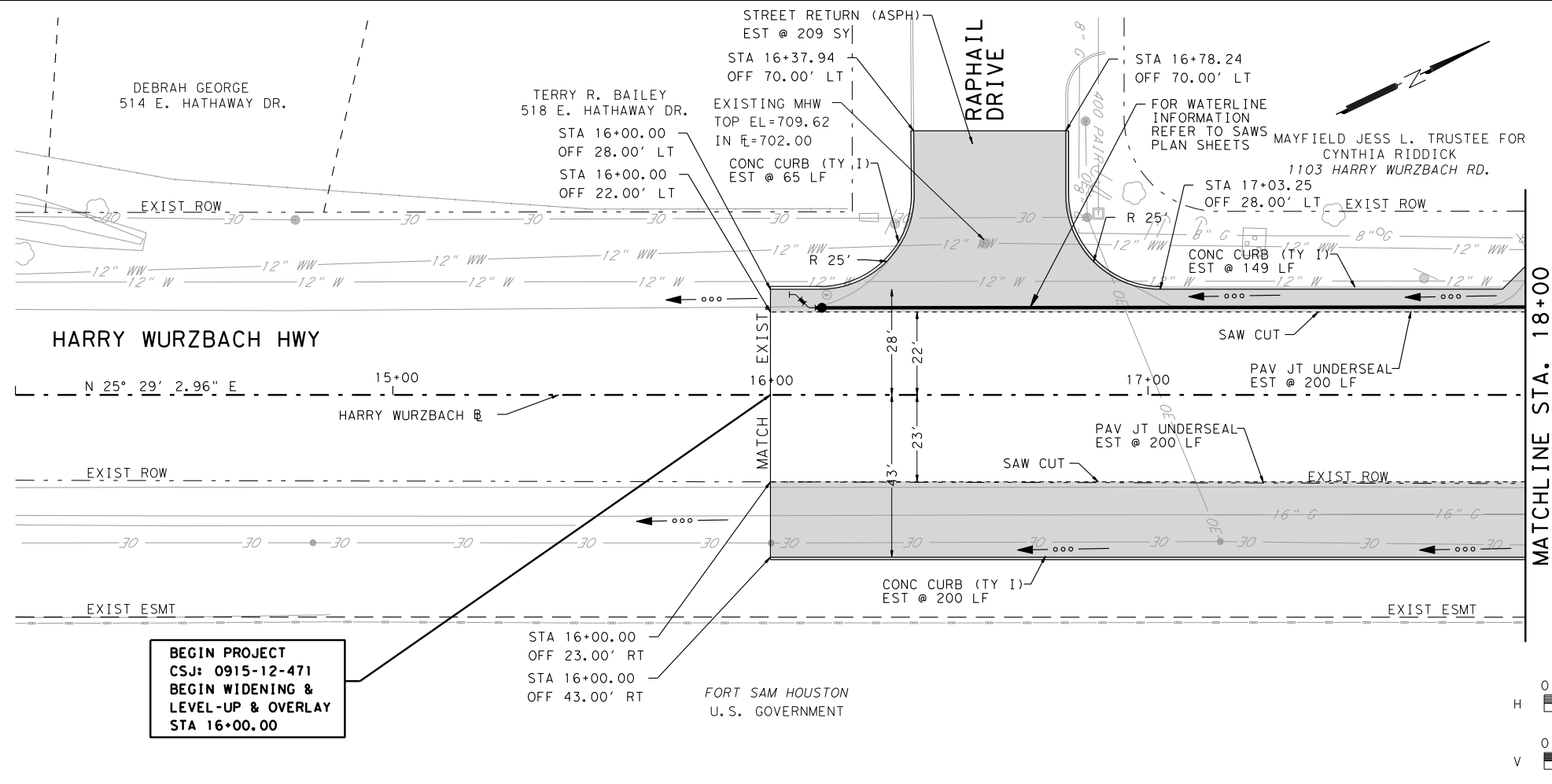
**Texas Department of Transportation**  
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**CITY OF SAN ANTONIO**  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

**FORT SAM HOUSTON TRANSPORTATION PROJECTS**  
**TCP/SW3P LAYOUT**  
**PHASE 1 STAGE 1**  
RITTIMAN RD. & HARRY WURZBACH INTERSECTION

Submit PROJECT NO.: \$csj DATE: \*\*\*\*\*  
DRWN. BY: RPR DSGN. BY: JDH CHKD. BY: RE SHEET NO.: \$tcp09



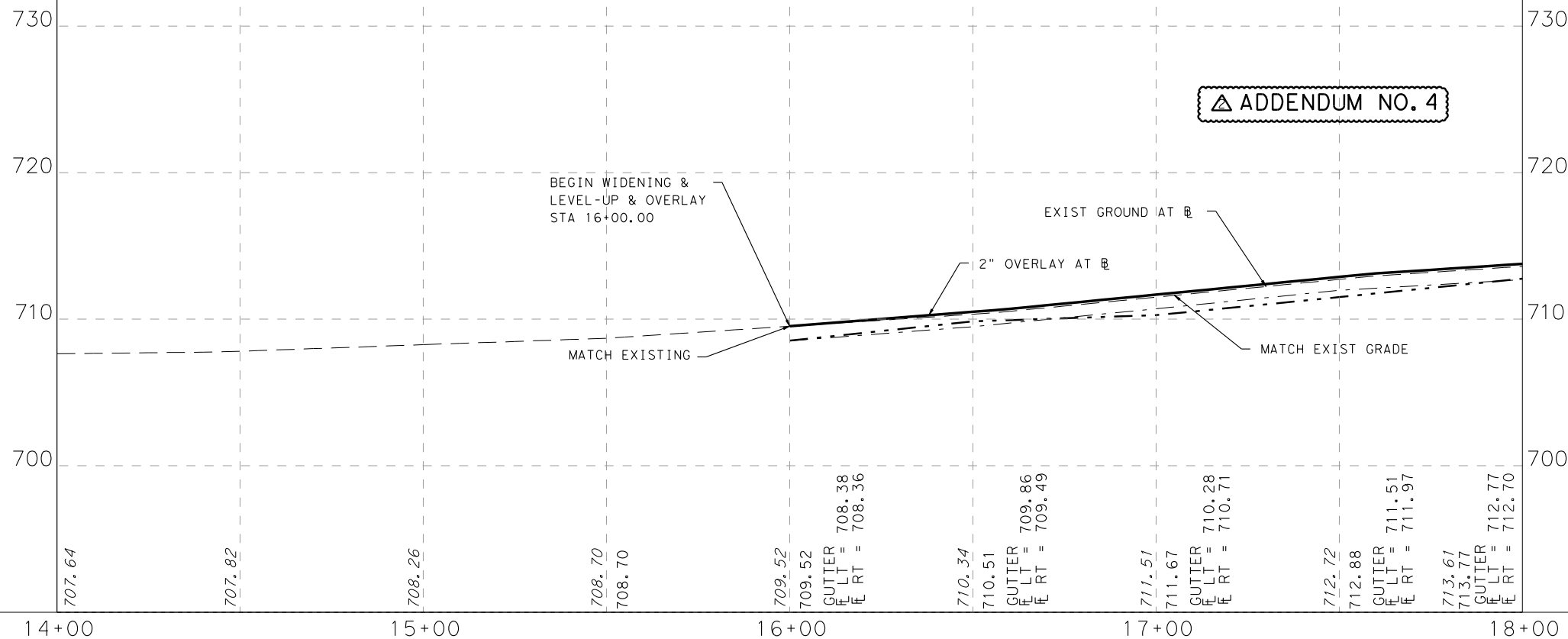


## PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

## PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @ EL	
GUTTER EL LEFT	
GUTTER EL RIGHT	



### CSJ 915-12-471

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	2.00
EXCAVATION (ROADWAY)	CY	153.00
SUBGRADE WIDENING (ORD COMP)	STA	2.00
EMBANKMENT (FINAL) (ORD COMP) (TY A)	CY	901.67
LIME (HYDRATED LIME (SLURRY))	TON	12.17
LIME TRT (EXST MATL) (6")	SY	901.67
ASPH (AC-5 OR 10 CRS/HFRS-2,RS/CRS-1P)	GAL	538.53
AGGR (TY-PB GR-4)	CY	17.95
D-GR HMA (METH) TY-B PG64-22 (LEVEL UP)	TON	55.00
D-GR HMA (QCQA) TY-B PG64-22	TON	572.51
D-GR HMA (QCQA) TY-C PG64-22	TON	197.46
PLANE ASPH CONC PAV (0" TO 2")	SY	1,000.00
PAV JT UNDERSEAL (48")	LF	400.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC) (4 IN)	CY	0.00
CONC CURB (TY 1)	LF	414.00
DRIVEWAYS (CONC)	SY	0.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	0.00
CONC DIRECTIONAL ISLAND	SY	0.00

1 OF 4

## TETRA TECH

TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM



Texas Department  
of Transportation

CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

FORT SAM HOUSTON TRANSPORTATION PROJECTS

## PLAN AND PROFILE

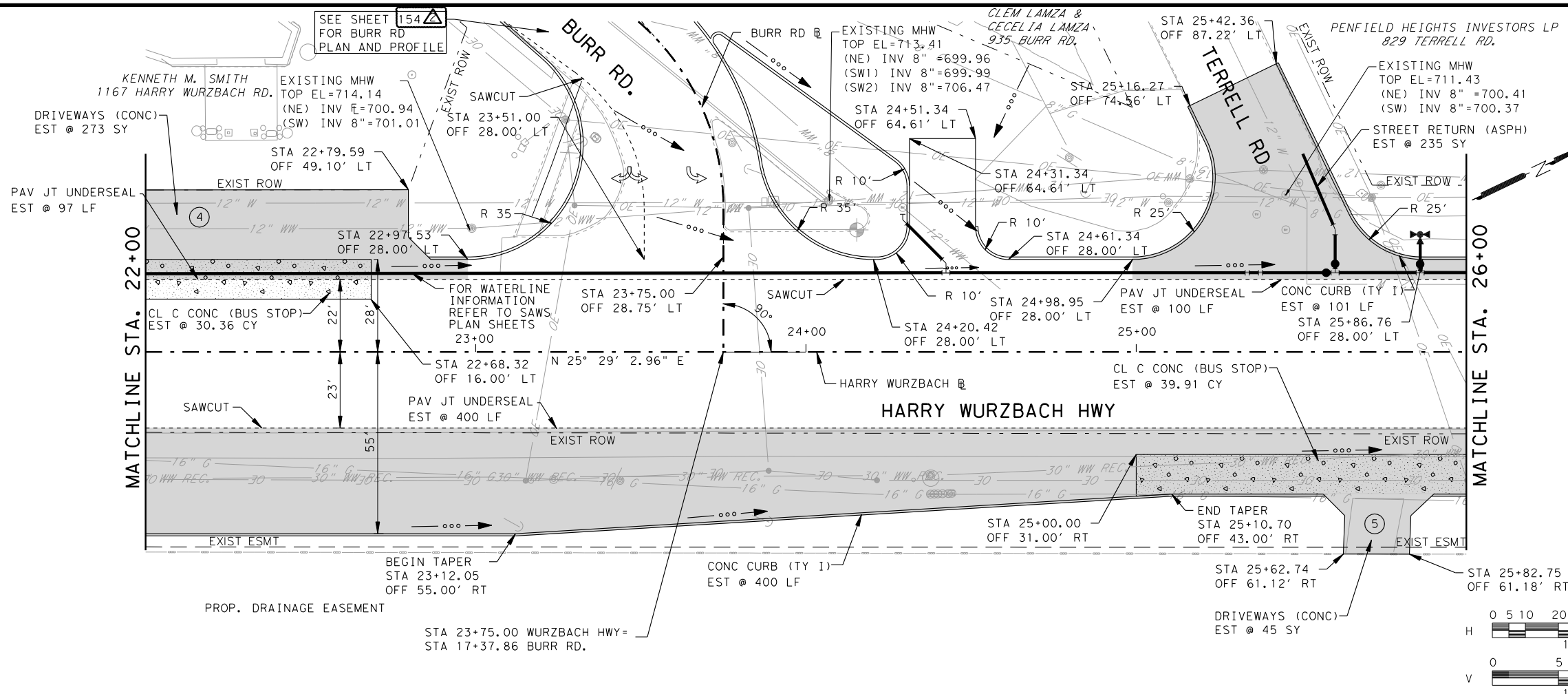
BURR RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470, etc	DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 140

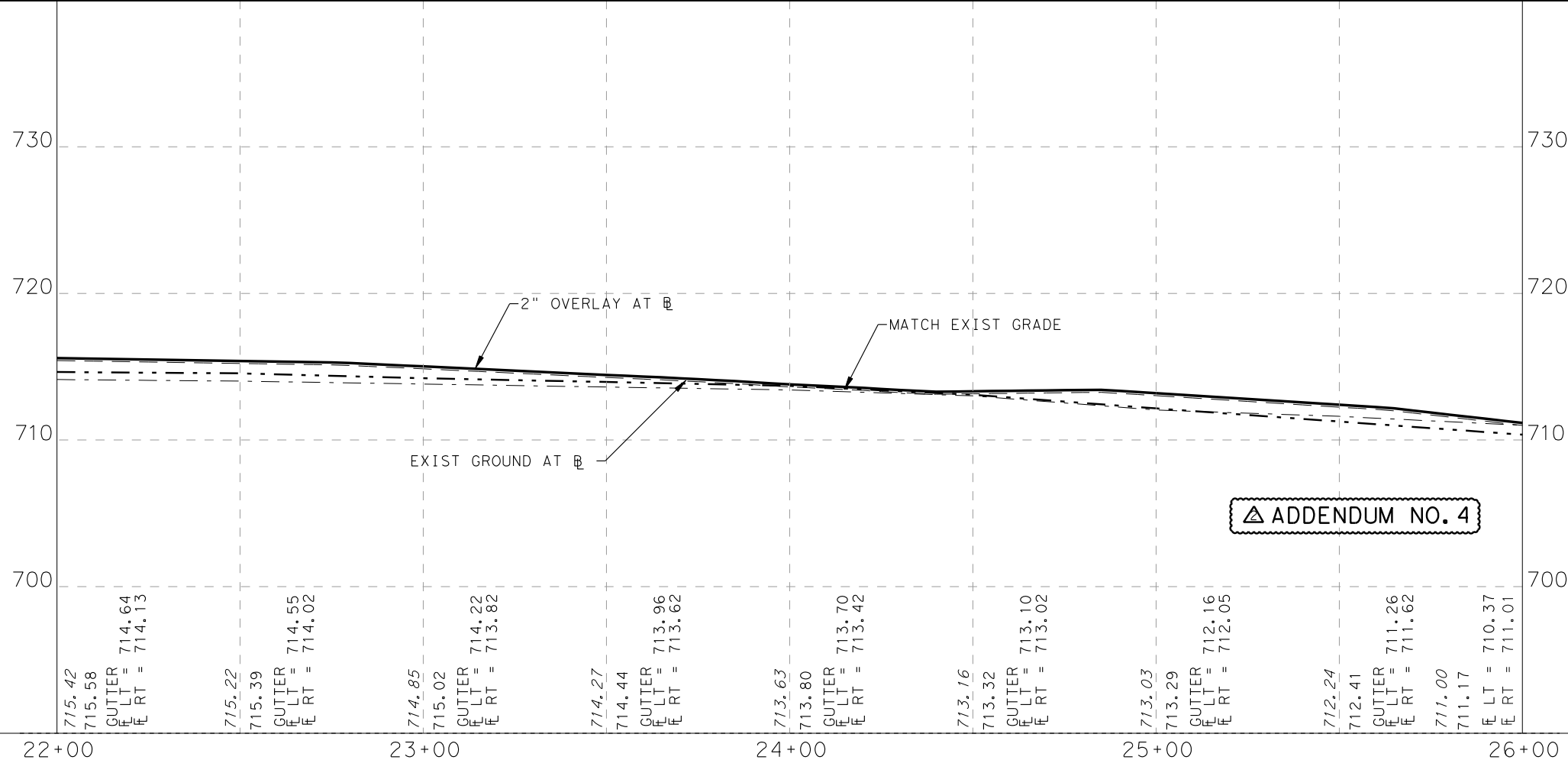
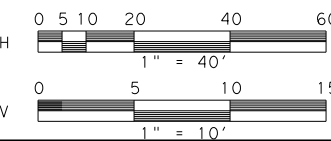








- PLAN VIEW LEGEND**
- PROPOSED CURB
  - FULL DEPTH RECONSTRUCTION
  - LEVEL-UP & OVERLAY
  - SAWCUT LINE
  - EXISTING EDGE ROADWAY
  - EXISTING RIGHT OF WAY
  - EXISTING FENCE
  - DRIVE NUMBER
  - ENVIRONMENTAL AREA OF CONCERN
- PROFILE VIEW LEGEND**
- PROPOSED GRADE
  - EXISTING GROUND @
  - GUTTER E LEFT
  - GUTTER E RIGHT



ADDENDUM NO. 4

3 OF 4

CSJ 915-12-471		
SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	4.00
EXCAVATION (ROADWAY)	CY	519.00
SUBGRADE WIDENING (ORD COMP)	STA	4.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	1,732.78
LIME (HYDRATED LIME (SLURRY))	TON	23.39
LIME TRT (EXST MATL) (6")	SY	1,732.78
ASPH(AC-5 OR 10 CRS/HFRS-2,RS/CRS-1P)	GAL	1,058.47
AGGR (TY-PB GR-4)	CY	35.28
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	110.00
D-GR HMA(QCQA) TY-B PG64-22	TON	1,095.45
D-GR HMA(QCQA) TY-C PG64-22	TON	388.10
PLANE ASPH CONC PAV(0" TO 2")	SY	2,000.00
PAV JT UNDERSEAL (48")	LF	597.00
CL C CONC (BUS STOP)	CY	39.91
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	501.00
DRIVEWAYS (CONC)	SY	318.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	0.00
CONC DIRECTIONAL ISLAND	SY	0.00

**TETRA TECH**  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM

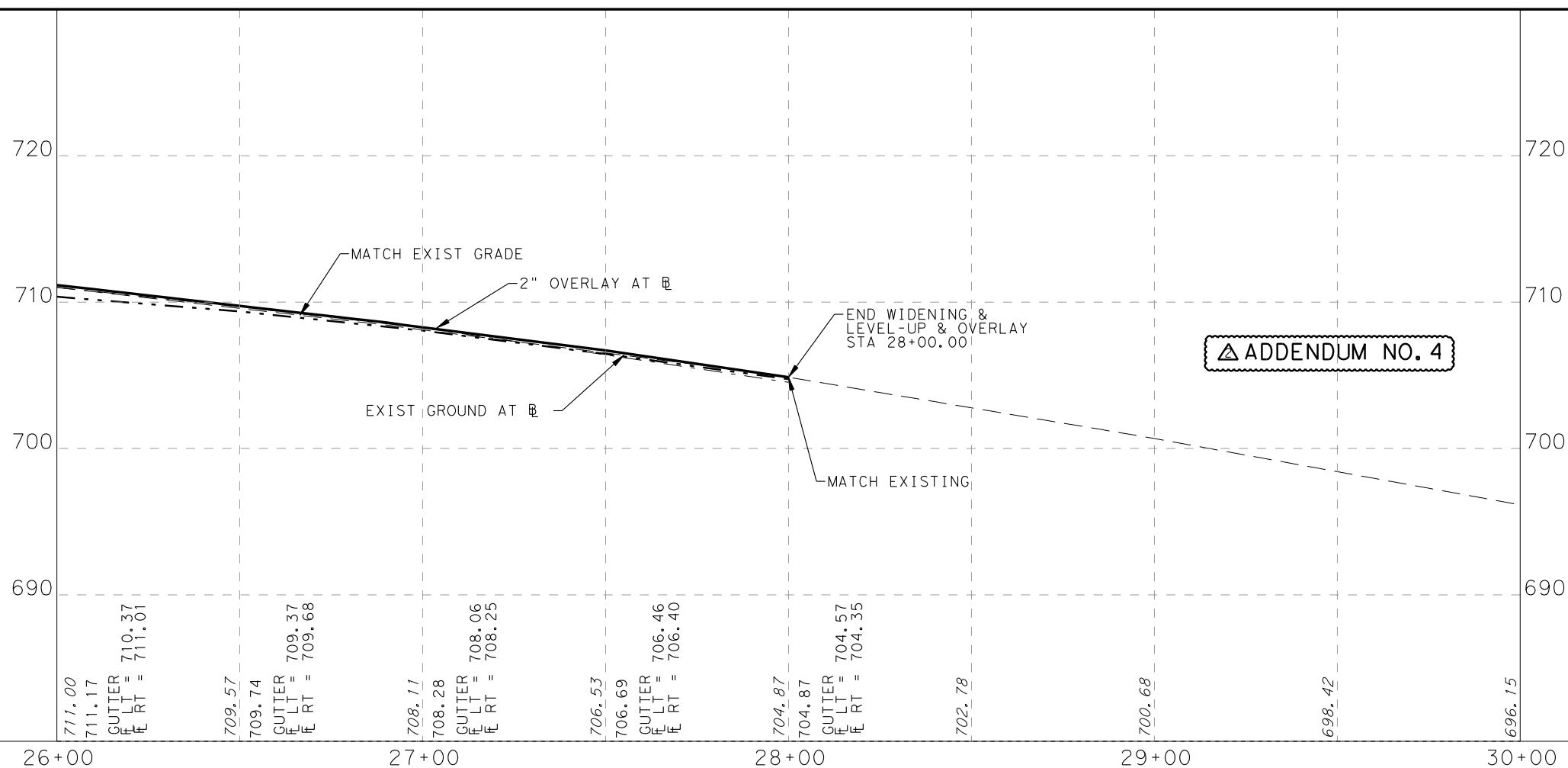
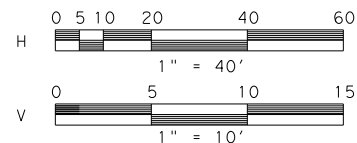
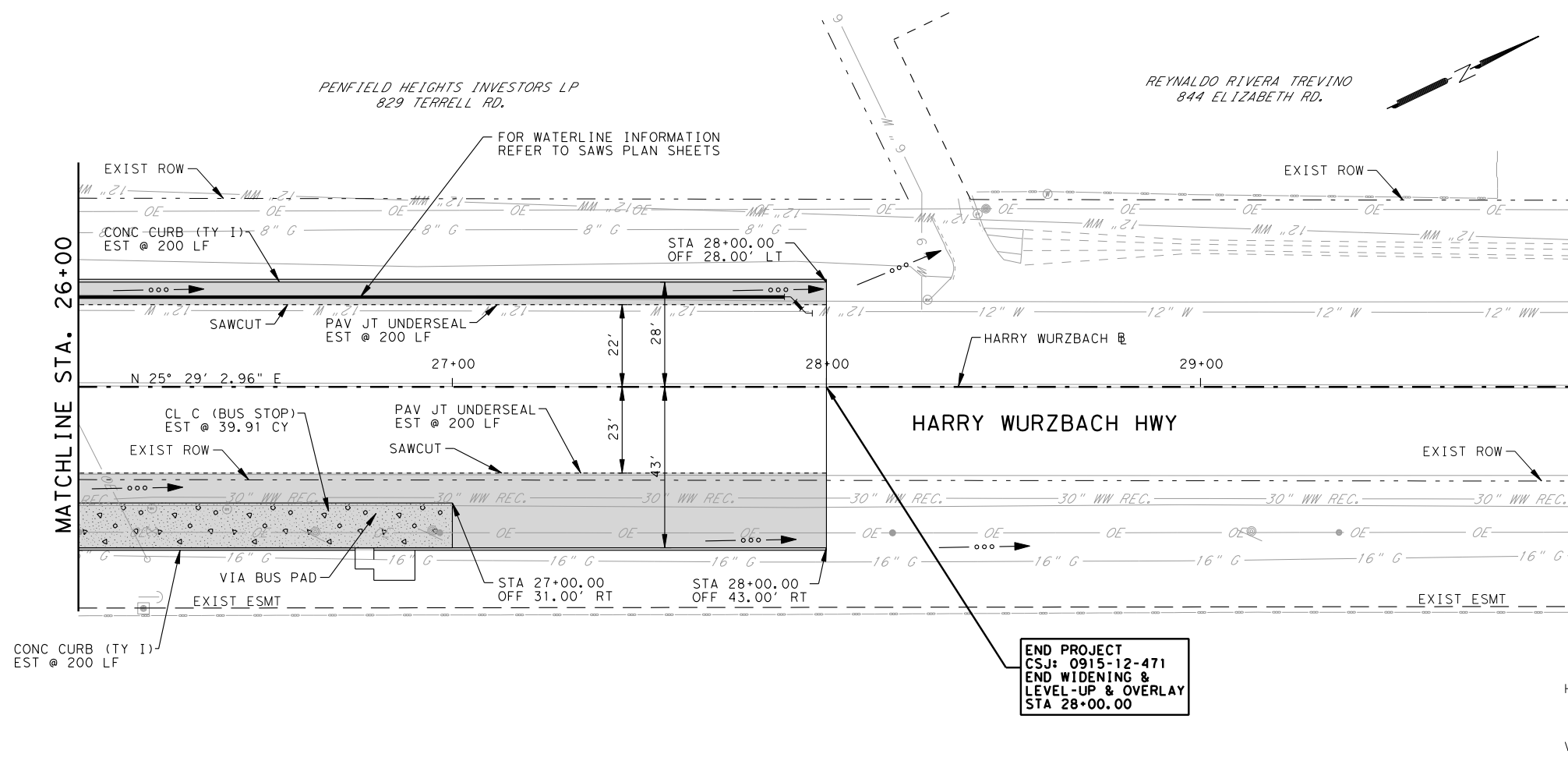
**Texas Department of Transportation**

**CITY OF SAN ANTONIO**  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
FORT SAM HOUSTON TRANSPORTATION PROJECTS










**PLAN AND PROFILE**  
BURR RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/22/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 142





### PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

### PROFILE VIEW LEGEND

PROPOSED GRADE \_\_\_\_\_

EXISTING GROUND @ 1/2" = 1' \_\_\_\_\_


GUTTER 1/2" LEFT \_\_\_\_\_

GUTTER 1/2" RIGHT \_\_\_\_\_

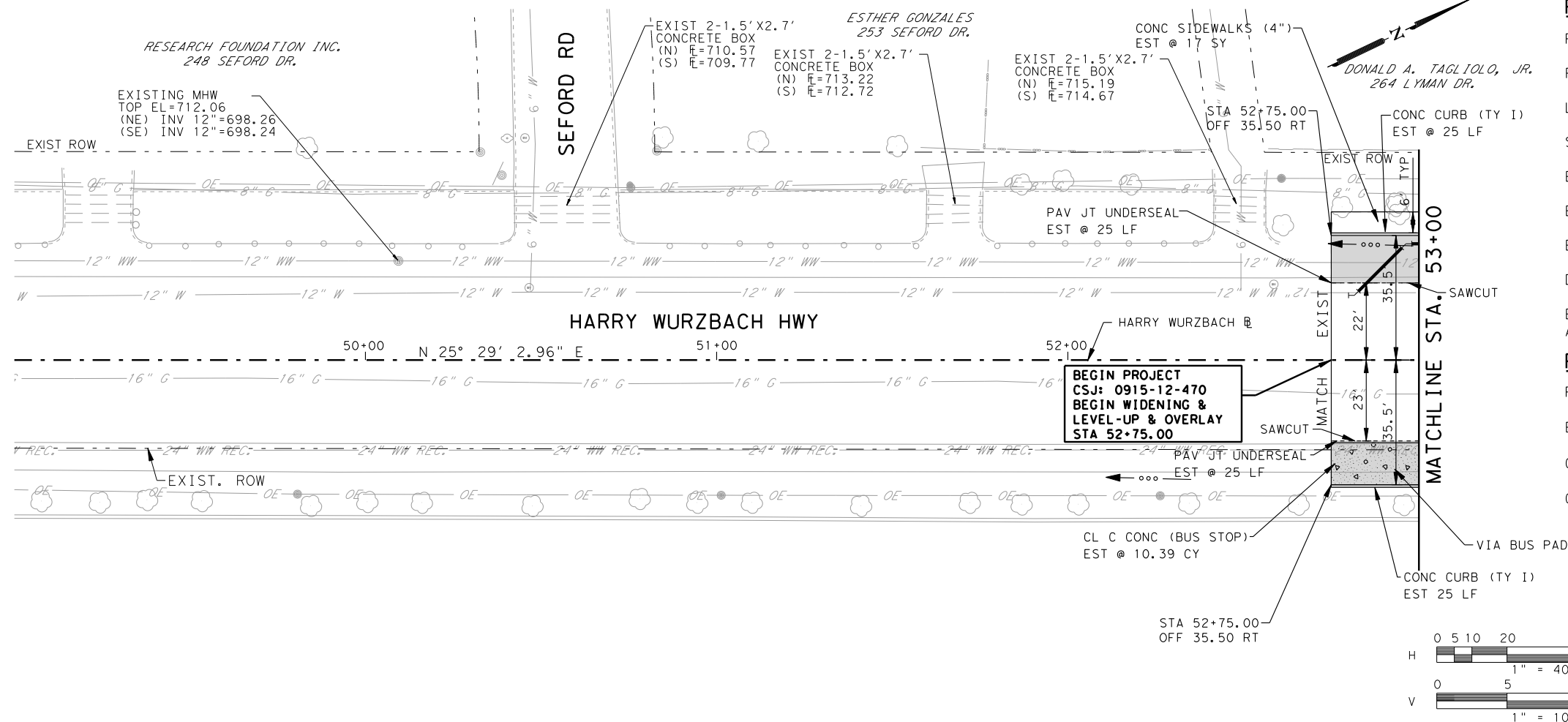


SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	2.00
EXCAVATION (ROADWAY)	CY	1,177.00
SUBGRADE WIDENING (ORD COMP)	STA	2.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	679.56
LIME (HYDRATED LIME (SLURRY))	TON	9.17
LIME TRT (EXST MATL) (6")	SY	679.56
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	473.33
AGGR (TY-PB GR-4)	CY	15.78
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	55.00
D-GR HMA(QCQA) TY-B PG64-22	TON	426.21
D-GR HMA(QCQA) TY-C PG64-22	TON	173.56
PLANE ASPH CONC PAV(0" TO 2")	SY	1,000.00
PAV JT UNDERSEAL (48")	LF	400.00
CL C CONC (BUS STOP)	CY	39.91
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	400.00
DRIVEWAYS (CONC)	SY	0.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	0.00
CONC DIRECTIONAL ISLAND	SY	0.00

4 OF 4

<h1 style="margin: 0;">TETRA TECH</h1> <p style="margin: 0;">TBPE F-3924</p> <p style="margin: 0;">700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205</p> <p style="margin: 0;">TELEPHONE #: (210) 226-2922      FAX #: (210) 226-8497      WEBSITE: <a href="http://WWW.TETRATECH.COM">WWW.TETRATECH.COM</a></p>		
 <p style="margin: 0;">© 2011</p>	<p style="font-size: 1.2em; font-family: serif;"><i>Texas Department of Transportation</i></p>	
<h2 style="margin: 0;">CITY OF SAN ANTONIO</h2> <p style="margin: 0;">CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT</p> <p style="margin: 0;">FORT SAM HOUSTON TRANSPORTATION PROJECTS</p> <h1 style="margin: 0;">PLAN AND PROFILE</h1> <p style="margin: 0;">BURR RD. &amp; HARRY WURZBACH INTERSECTION</p>		
FINAL SUBMITTAL DRWN. BY: RPR	PROJECT NO.: 915-12-470,etc DSGN. BY: JDH      CHKD. BY: RE	DATE: 8/21/2011 SHEET NO.: 143



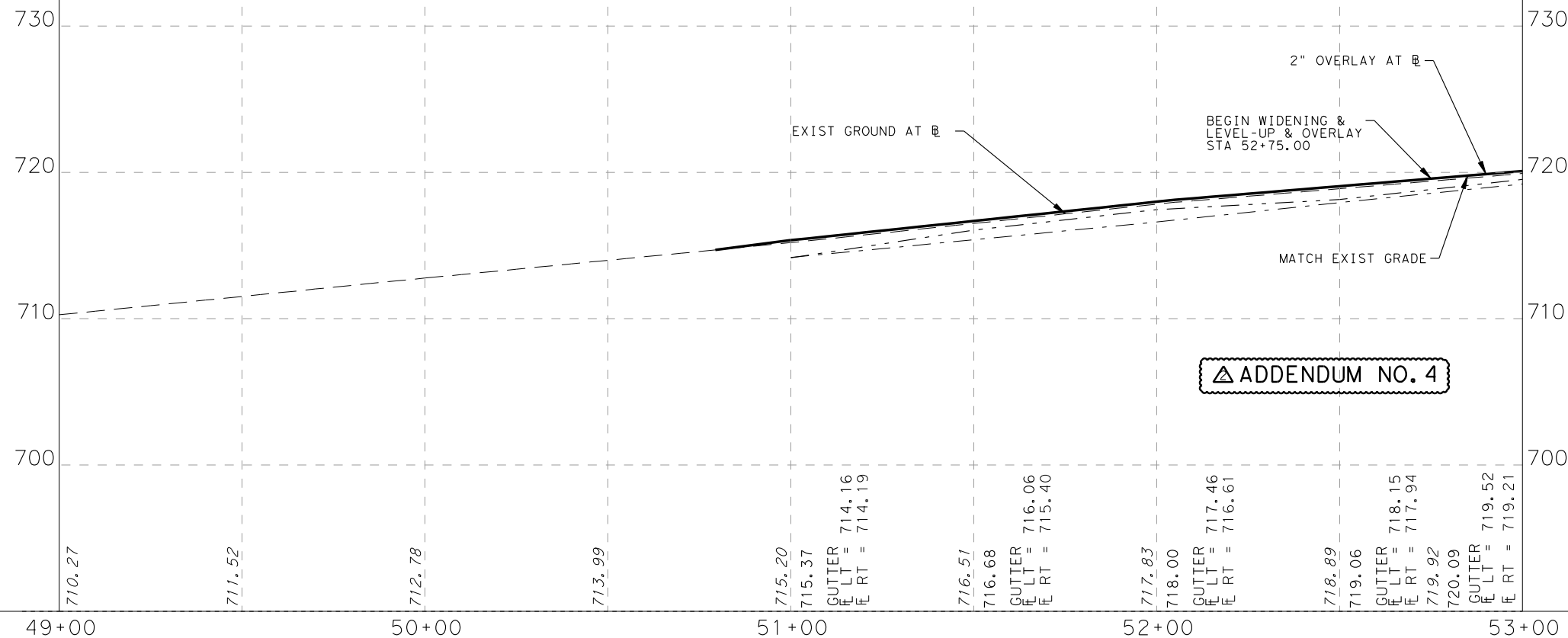


## PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	#
ENVIRONMENTAL AREA OF CONCERN	

## PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @	
GUTTER E LEFT	
GUTTER E RIGHT	



1 OF 5

### CSJ 915-12-470

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	0.25
EXCAVATION (ROADWAY)	CY	171.00
SUBGRADE WIDENING (ORD COMP)	STA	0.25
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	85.44
LIME (HYDRATED LIME (SLURRY))	TON	1.15
LIME TRT (EXST MATL) (6")	SY	85.44
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	62.57
AGGR (TY-PB GR-4)	CY	2.09
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	7.00
D-GR HMA(QCQA) TY-B PG64-22	TON	53.20
D-GR HMA(QCQA) TY-C PG64-22	TON	22.94
PLANE ASPH CONC PAV(0" TO 2")	SY	125.00
PAV JT UNDERSEAL (48")	LF	50.00
CL C CONC (BUS STOP)	CY	10.39
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY 1)	LF	50.00
DRIVEWAYS (CONC)	SY	0.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	17.00
CONC DIRECTIONAL ISLAND	SY	0.00

## TETRA TECH

TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM



Texas Department  
of Transportation

CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

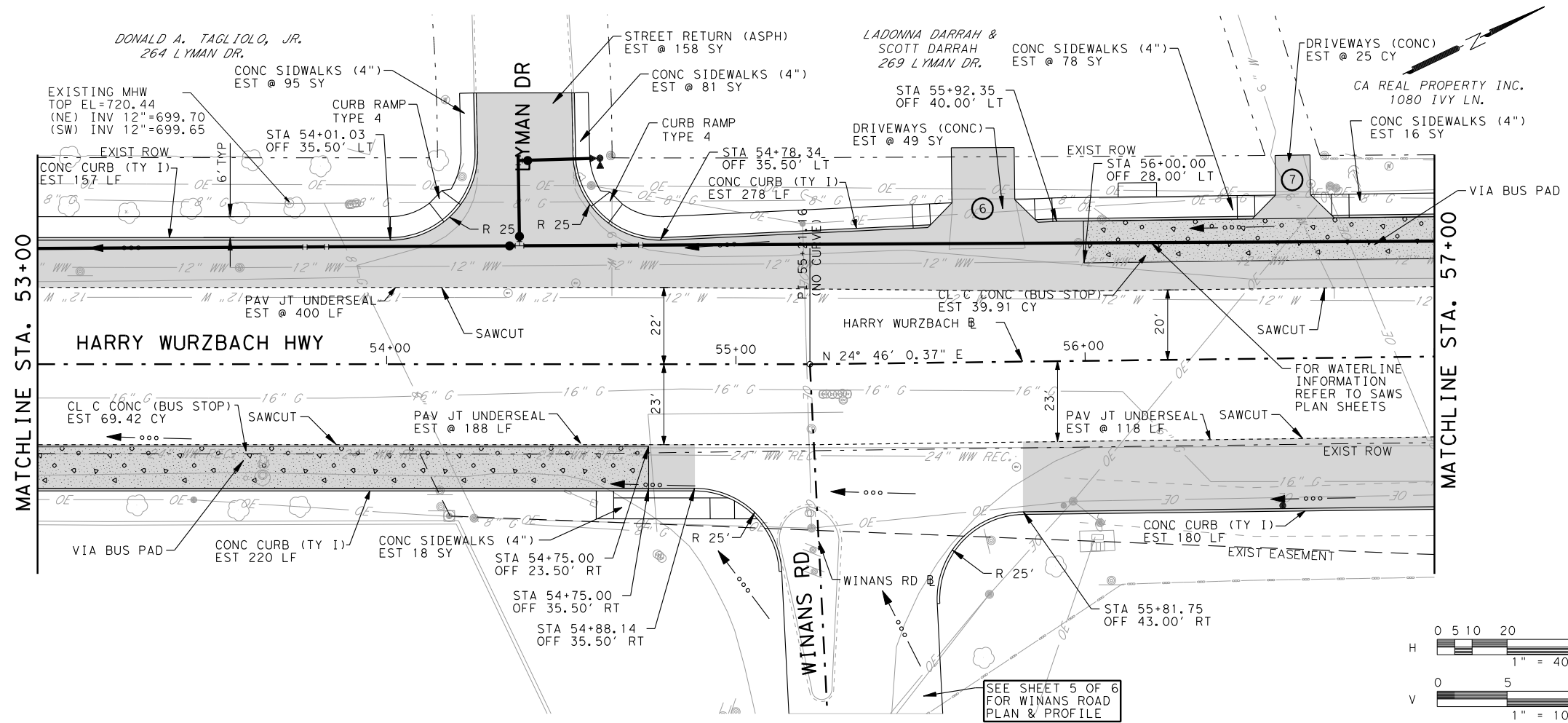
FORT SAM HOUSTON TRANSPORTATION PROJECTS

## PLAN AND PROFILE

WINANS RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 144



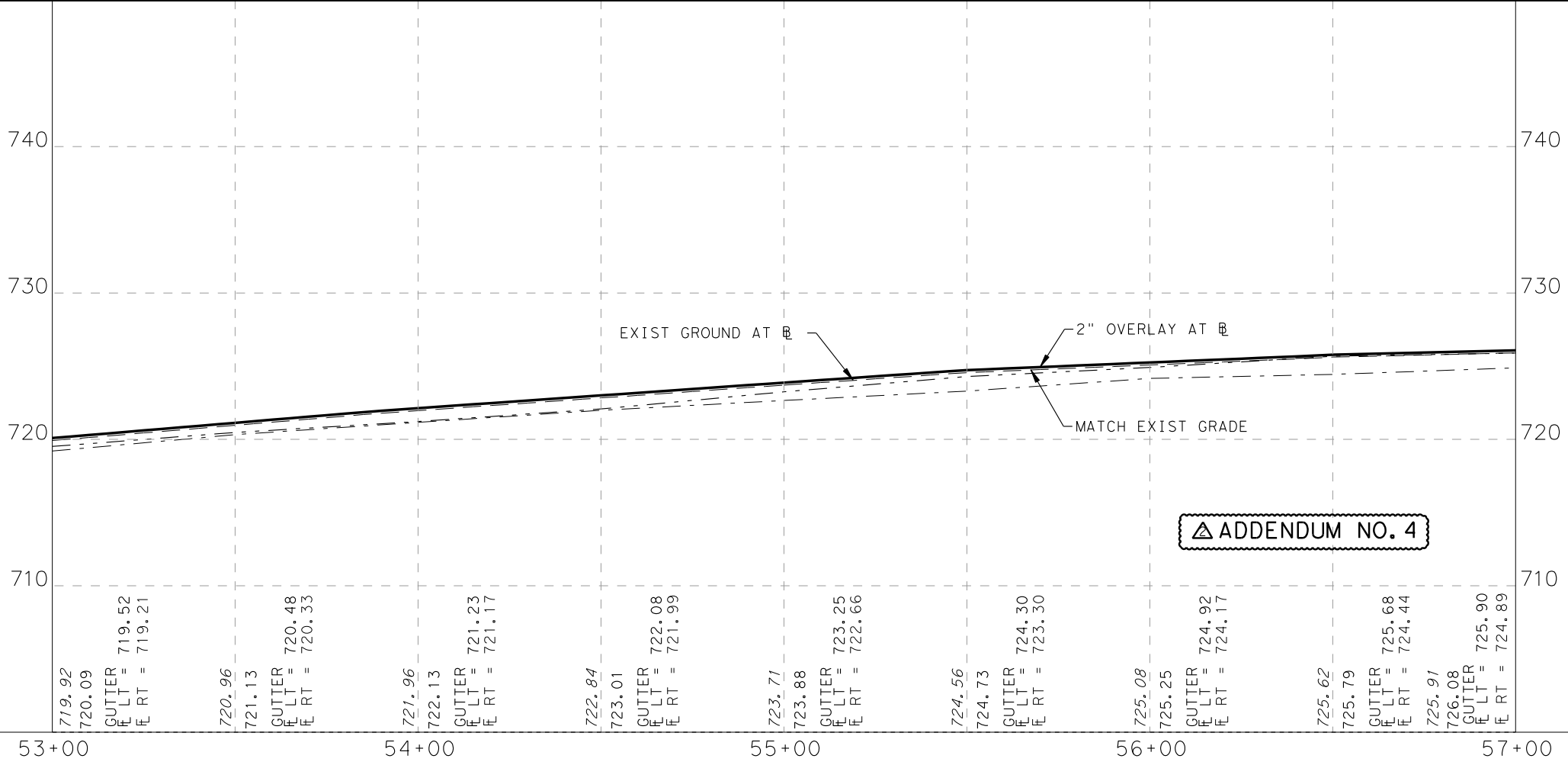
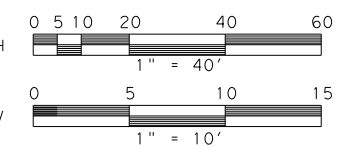


PLAN VIEW LEGEND

- PROPOSED CURB
- FULL DEPTH RECONSTRUCTION
- LEVEL-UP & OVERLAY
- SAWCUT LINE
- EXISTING EDGE ROADWAY
- EXISTING RIGHT OF WAY
- EXISTING FENCE
- DRIVE NUMBER
- ENVIRONMENTAL AREA OF CONCERN

PROFILE VIEW LEGEND

- PROPOSED GRADE
- EXISTING GROUND @
- GUTTER E LEFT
- GUTTER E RIGHT



CSJ 915-12-470			
SHEET TOTALS			
DESCRIPTION	UNIT	TOTAL	
PREPARING ROW	STA	4.00	
EXCAVATION (ROADWAY)	CY	235.00	
SUBGRADE WIDENING (ORD COMP)	STA	4.00	
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	1,609.22	
LIME (HYDRATED LIME (SLURRY))	TON	21.72	
LIME TRT (EXST MATL) (6")	SY	1,609.22	
ASPH(AC-5 OR 10 CRS/HFRS-2,RS/CRS-1P)	GAL	999.70	
AGGR (TY-PB GR-4)	CY	33.32	
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	108.00	
D-GR HMA(QCQA) TY-B PG64-22	TON	1,004.01	
D-GR HMA(QCQA) TY-C PG64-22	TON	366.56	
PLANE ASPH CONC PAV(0" TO 2")	SY	1,966.00	
PAV JT UNDERSEAL (48")	LF	706.00	
CL C CONC (BUS STOP)	CY	108.77	
RIPRAP (CONC)(4 IN)	CY	0.00	
CONC CURB (TY I)	LF	835.00	
DRIVEWAYS (CONC)	SY	74.00	
CURB RAMPS (TY 4)	EA	2.00	
CURB RAMPS (TY 5)	EA	0.00	
CONC SIDEWALK (4")	SY	288.00	
CONC DIRECTIONAL ISLAND	SY	0.00	

2 OF 5

**TETRA TECH**  
TBE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM

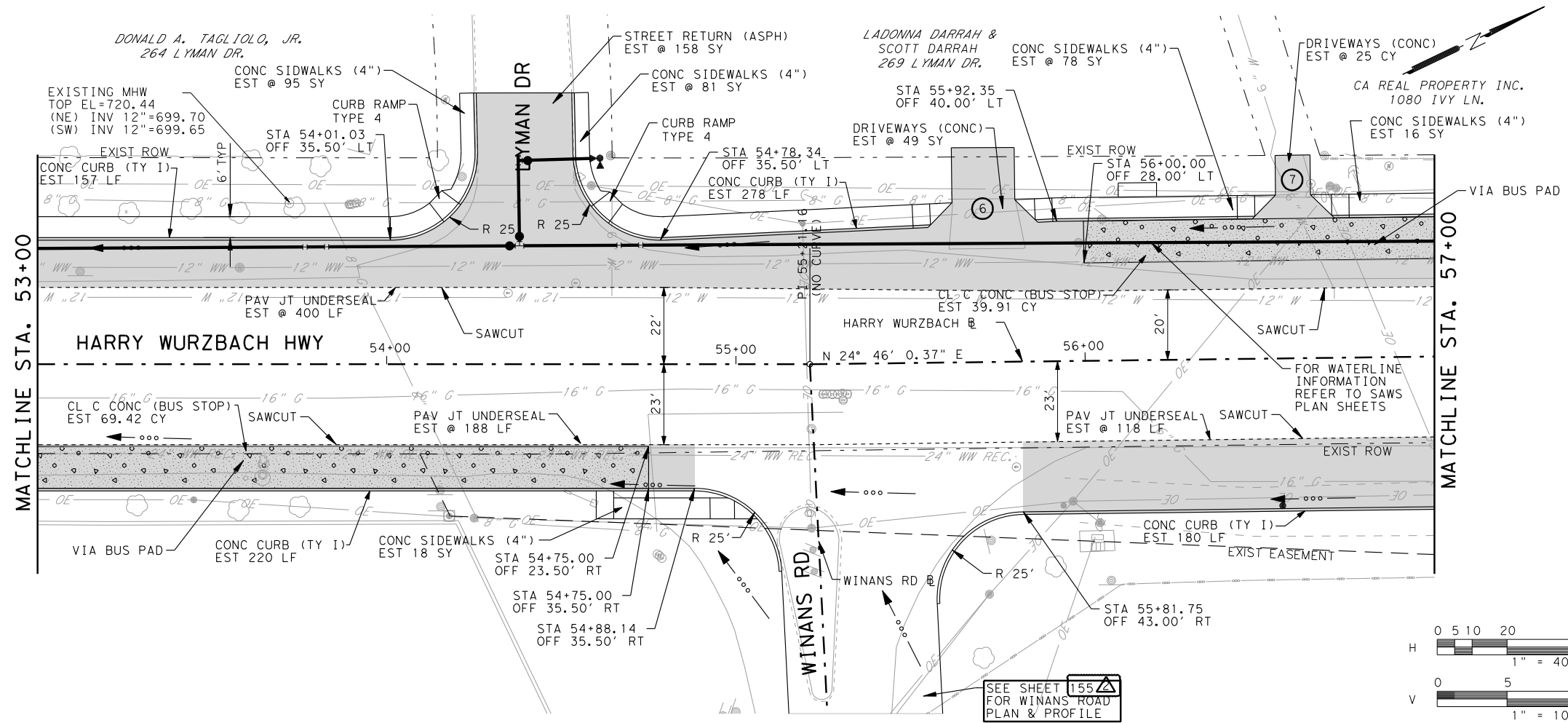
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FORT SAM HOUSTON TRANSPORTATION PROJECTS

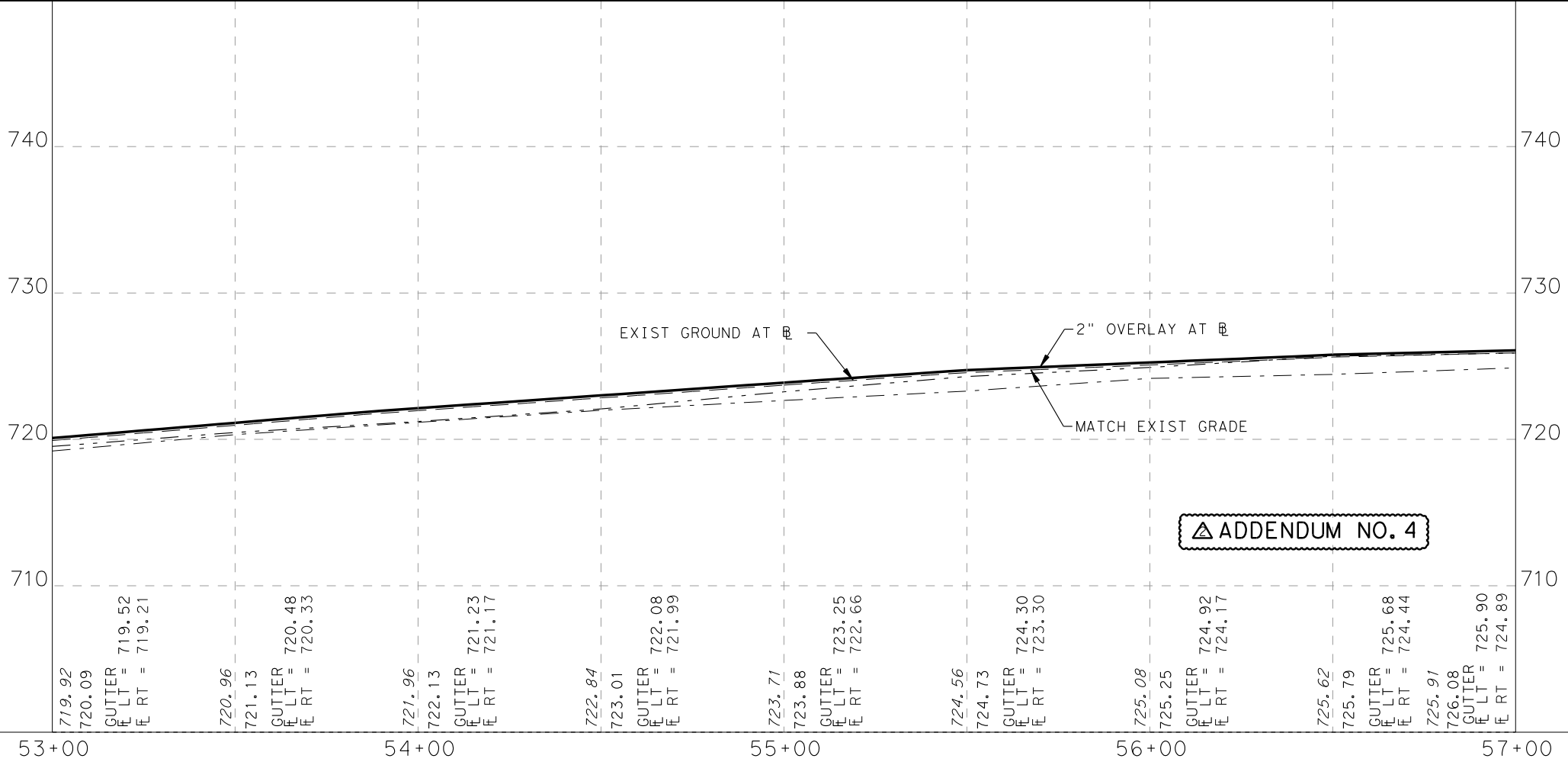
**PLAN AND PROFILE**  
WINANS RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
SHEET NO.: 145		





- PLAN VIEW LEGEND**
- PROPOSED CURB
  - FULL DEPTH RECONSTRUCTION
  - LEVEL-UP & OVERLAY
  - SAWCUT LINE
  - EXISTING EDGE ROADWAY
  - EXISTING RIGHT OF WAY
  - EXISTING FENCE
  - DRIVE NUMBER
  - ENVIRONMENTAL AREA OF CONCERN
- PROFILE VIEW LEGEND**
- PROPOSED GRADE
  - EXISTING GROUND @
  - GUTTER E LEFT
  - GUTTER E RIGHT



SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	4.00
EXCAVATION (ROADWAY)	CY	235.00
SUBGRADE WIDENING (ORD COMP)	STA	4.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	1,609.22
LIME (HYDRATED LIME (SLURRY))	TON	21.72
LIME TRT (EXST MATL) (6")	SY	1,609.22
ASPH(AC-5 OR 10 CRS/HFRS-2,RS/CRS-1P)	GAL	999.70
AGGR (TY-PB GR-4)	CY	33.32
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	108.00
D-GR HMA(QCQA) TY-B PG64-22	TON	1,004.01
D-GR HMA(QCQA) TY-C PG64-22	TON	366.56
PLANE ASPH CONC PAV(0" TO 2")	SY	1,966.00
PAV JT UNDERSEAL (48")	LF	706.00
CL C CONC (BUS STOP)	CY	108.77
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	835.00
DRIVEWAYS (CONC)	SY	74.00
CURB RAMPS (TY 4)	EA	2.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	288.00
CONC DIRECTIONAL ISLAND	SY	0.00

2 OF 5

**TETRA TECH**  
TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM

**Texas Department of Transportation**

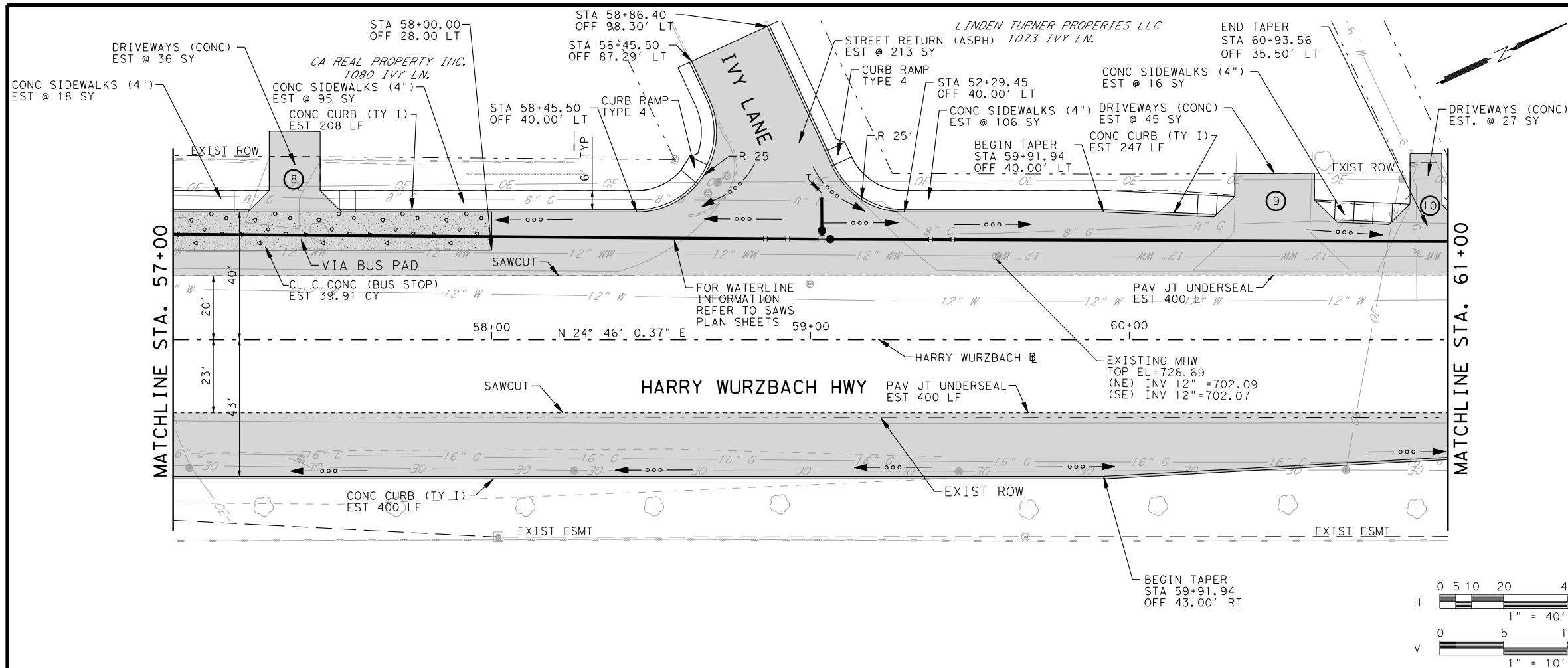
**CITY OF SAN ANTONIO**  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
FORT SAM HOUSTON TRANSPORTATION PROJECTS

**PLAN AND PROFILE**  
WINANS RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/22/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 145



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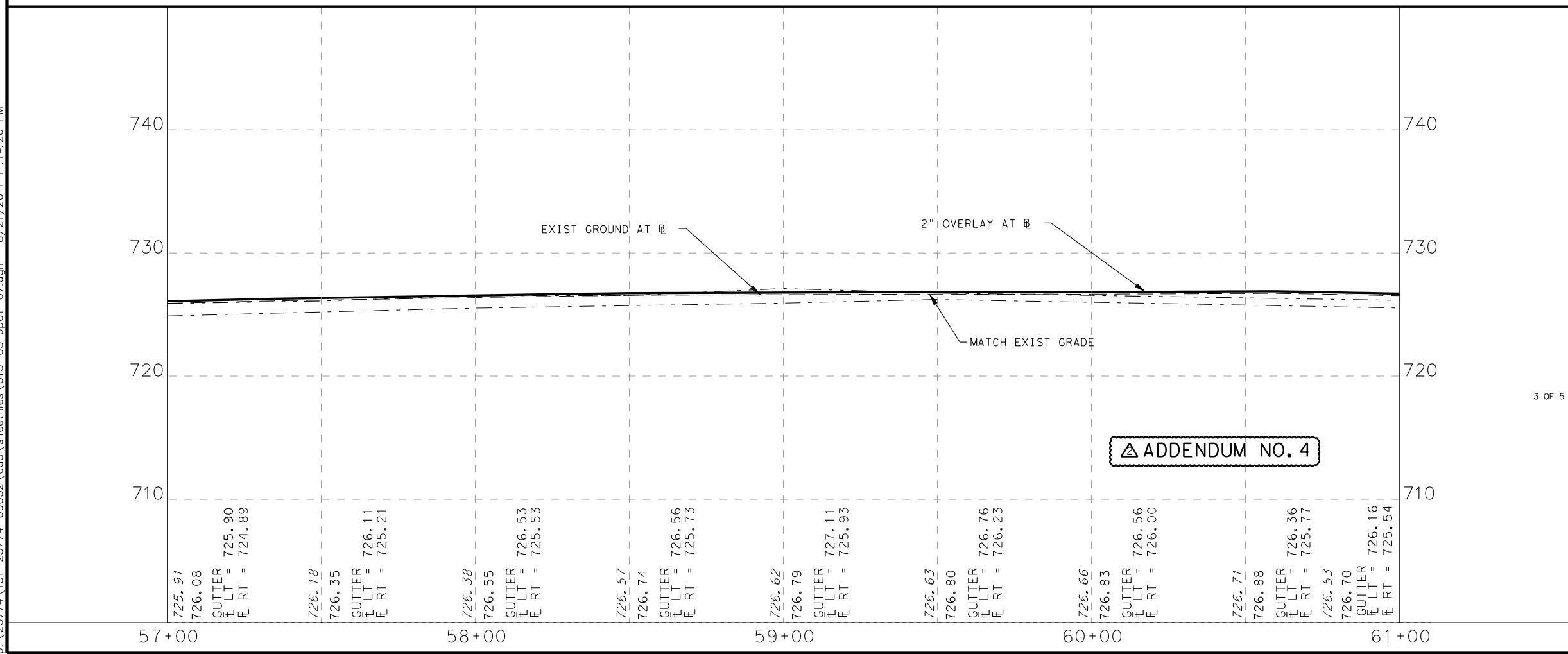
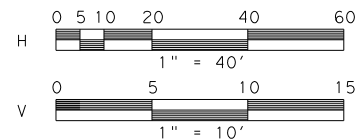


### PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

### PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @ E	
GUTTER E LEFT	
GUTTER E RIGHT	



### CSJ 915-12-470

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	4.00
EXCAVATION (ROADWAY)	CY	278.00
SUBGRADE WIDENING (ORD COMP)	STA	4.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	2,154.56
LIME (HYDRATED LIME (SLURRY))	TON	29.09
LIME TRT (EXST MATL) (6")	SY	2,154.56
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	1,151.07
AGGR (TY-PB GR-4)	CY	38.37
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	105.00
D-GR HMA(QCQA) TY-B PG64-22	TON	1,368.69
D-GR HMA(QCQA) TY-C PG64-22	TON	422.06
PLANE ASPH CONC PAV(0" TO 2")	SY	1,911.00
PAV JT UNDERSEAL (48")	LF	800.00
CL C CONC (BUS STOP)	CY	39.91
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	855.00
DRIVEWAYS (CONC)	SY	125.00
CURB RAMPS (TY 4)	EA	2.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	235.00
CONC DIRECTIONAL ISLAND	SY	0.00

3 OF 5

### TETRA TECH

TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM



Texas Department of Transportation

### CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

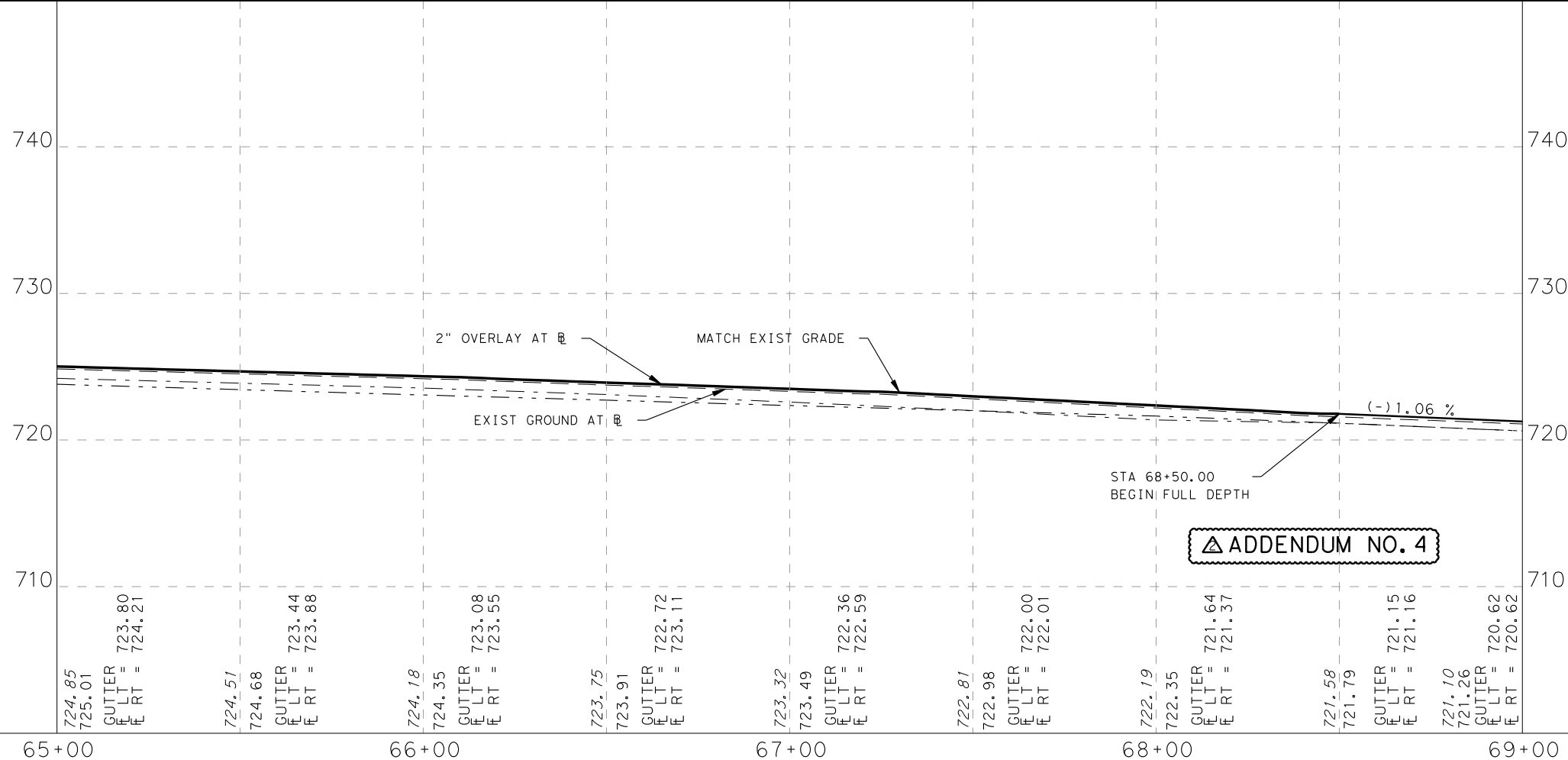
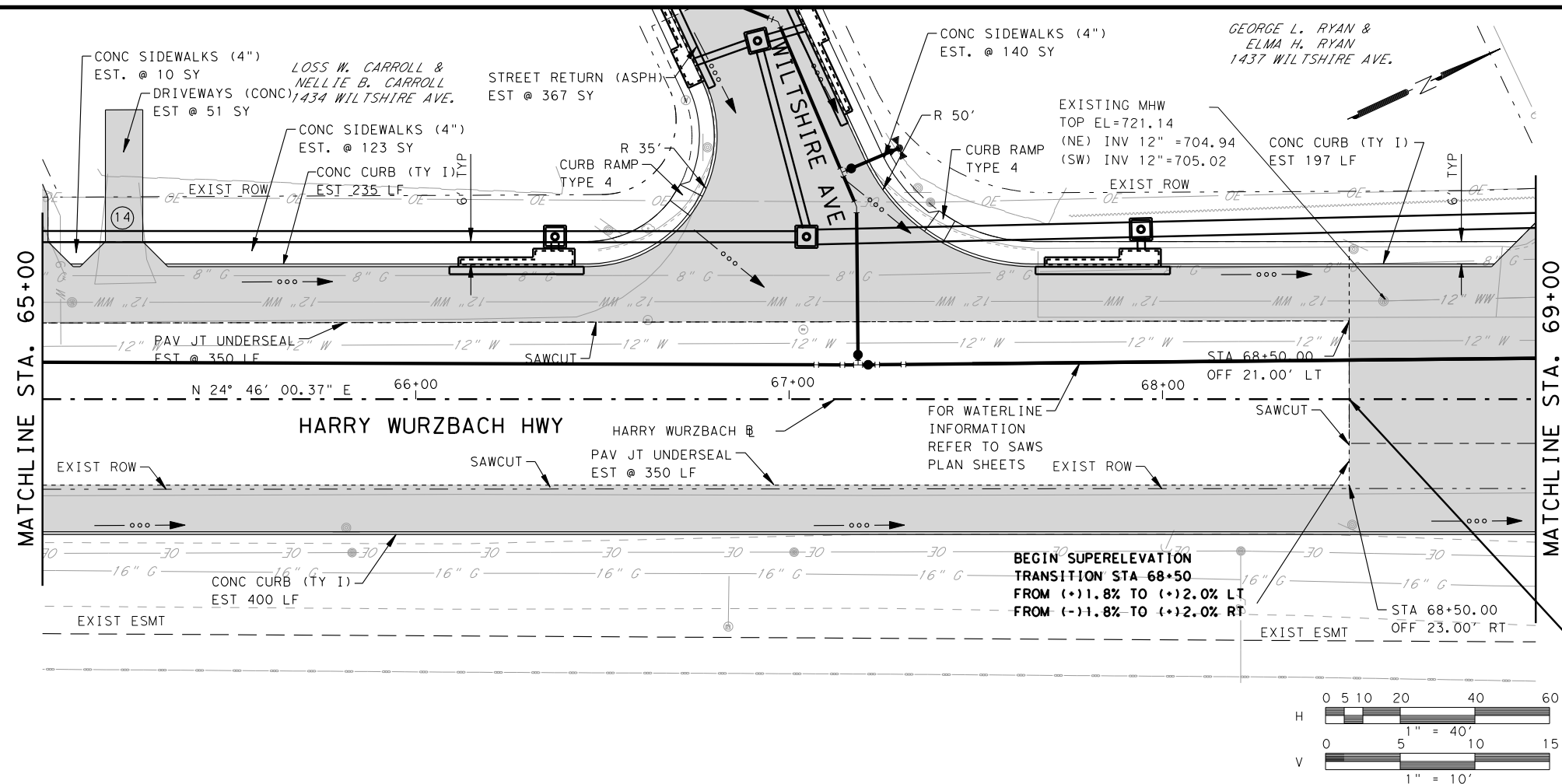
FORT SAM HOUSTON TRANSPORTATION PROJECTS

### PLAN AND PROFILE

WINANS RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 146





CSJ 915-12-470

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	4.00
EXCAVATION (ROADWAY)	CY	199.00
SUBGRADE WIDENING (ORD COMP)	STA	3.50
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	2,052.56
LIME (HYDRATED LIME (SLURRY))	TON	27.71
LIME TRT (EXST MATL) (6")	SY	2,052.56
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	1,056.70
AGGR (TY-PB GR-4)	CY	35.22
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	94.00
D-GR HMA(QCQA) TY-B PG64-22	TON	1,304.53
D-GR HMA(QCQA) TY-C PG64-22	TON	387.46
PLANE ASPH CONC PAV(0" TO 2")	SY	1,700.00
PAV JT UNDERSEAL (48")	LF	700.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	832.00
DRIVEWAYS (CONC)	SY	52.00
CURB RAMPS (TY 4)	EA	2.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	273.00
CONC DIRECTIONAL ISLAND	SY	0.00
		0.00

5 OF 5

TETRA TECH  
TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
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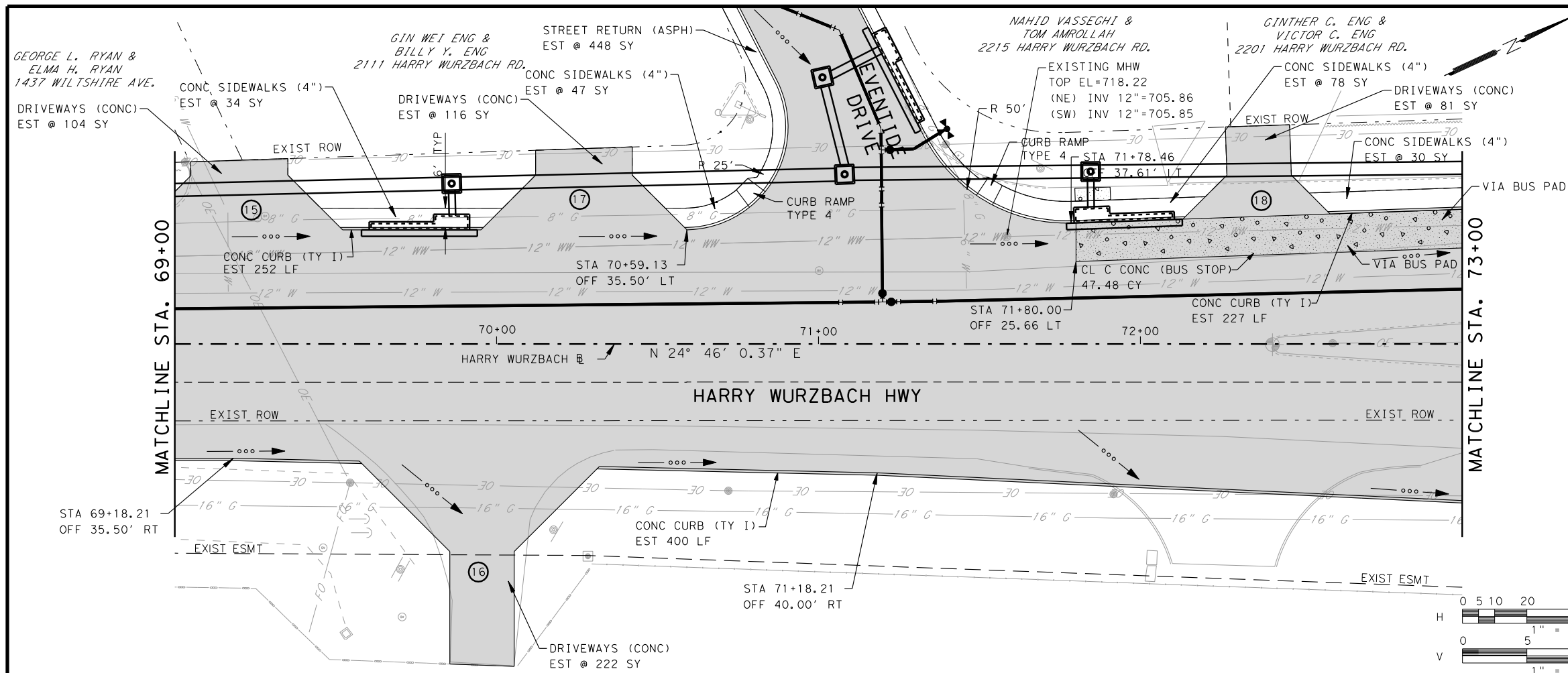
CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
FORT SAM HOUSTON TRANSPORTATION PROJECTS

















PLAN AND PROFILE

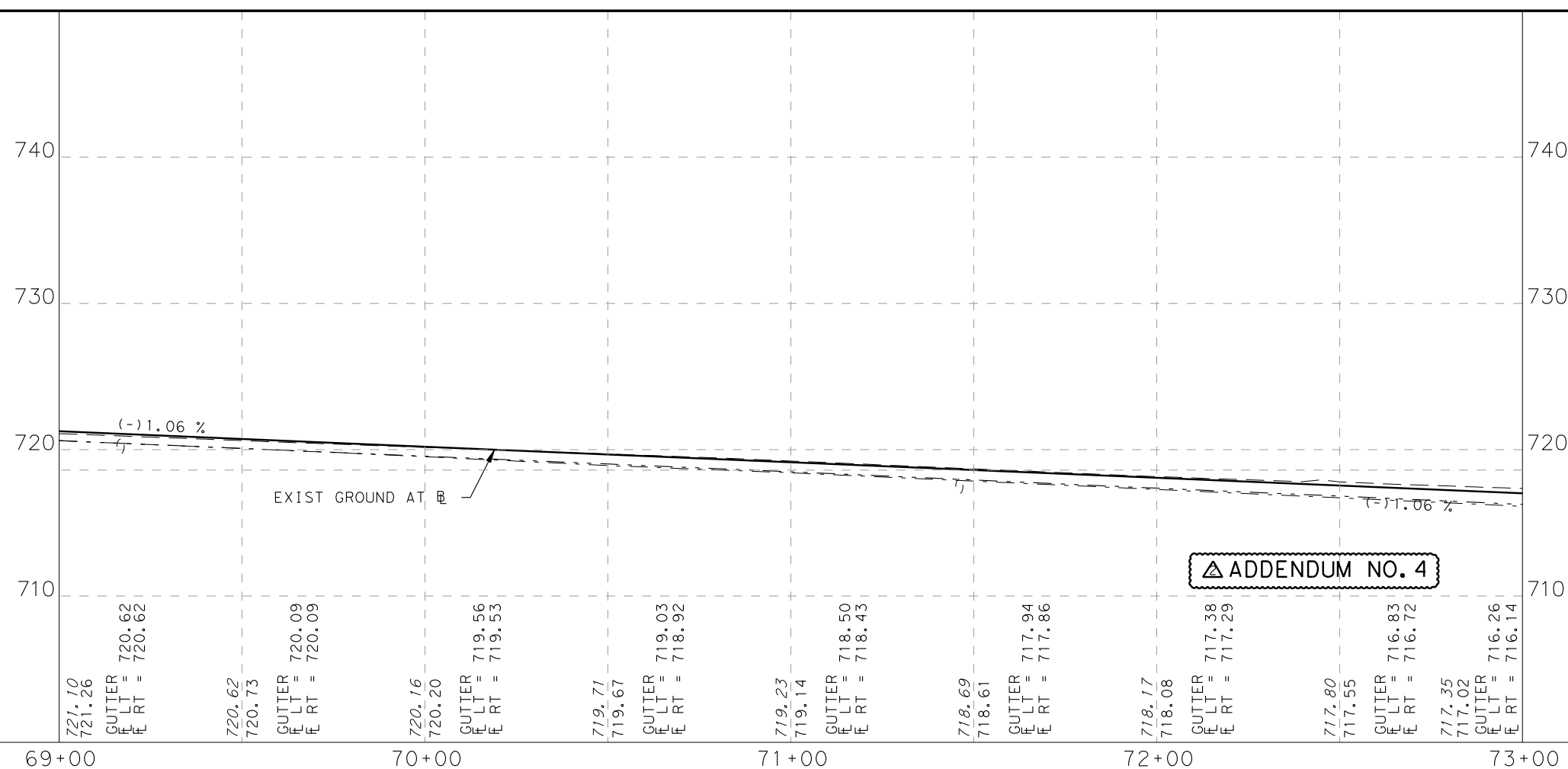
WINANS RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL PROJECT NO.: 915-12-470,etc DATE: 8/21/2011  
DRWN. BY: RPR DSGN. BY: JDH CHKD. BY: RE SHEET NO.: 148





<u>PLAN VIEW LEGEND</u>	
PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	
<u>PROFILE VIEW LEGEND</u>	
PROPOSED GRADE	
EXISTING GROUND @ 	
GUTTER  LEFT	
GUTTER  RIGHT	



SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	4.00
EXCAVATION (ROADWAY)	CY	160.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	4,054.89
LIME (HYDRATED LIME (SLURRY))	TON	54.74
LIME TRT (EXST MATL) (6")	SY	4,054.89
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	1,149.27
AGGR (TY-PB GR-4)	CY	38.31
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA(QCQA) TY-B PG64-22	TON	2,630.32
D-GR HMA(QCQA) TY-C PG64-22	TON	421.40
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	47.78
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	879.00
DRIVEWAYS (CONC)	SY	524.00
CURB RAMPS (TY 4)	EA	2.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	189.00
CONC DIRECTIONAL ISLAND	SY	0.00

1 OF 5

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FORT SAM HOUSTON TRANSPORTATION PROJECTS	

PLAN AND PROFILE

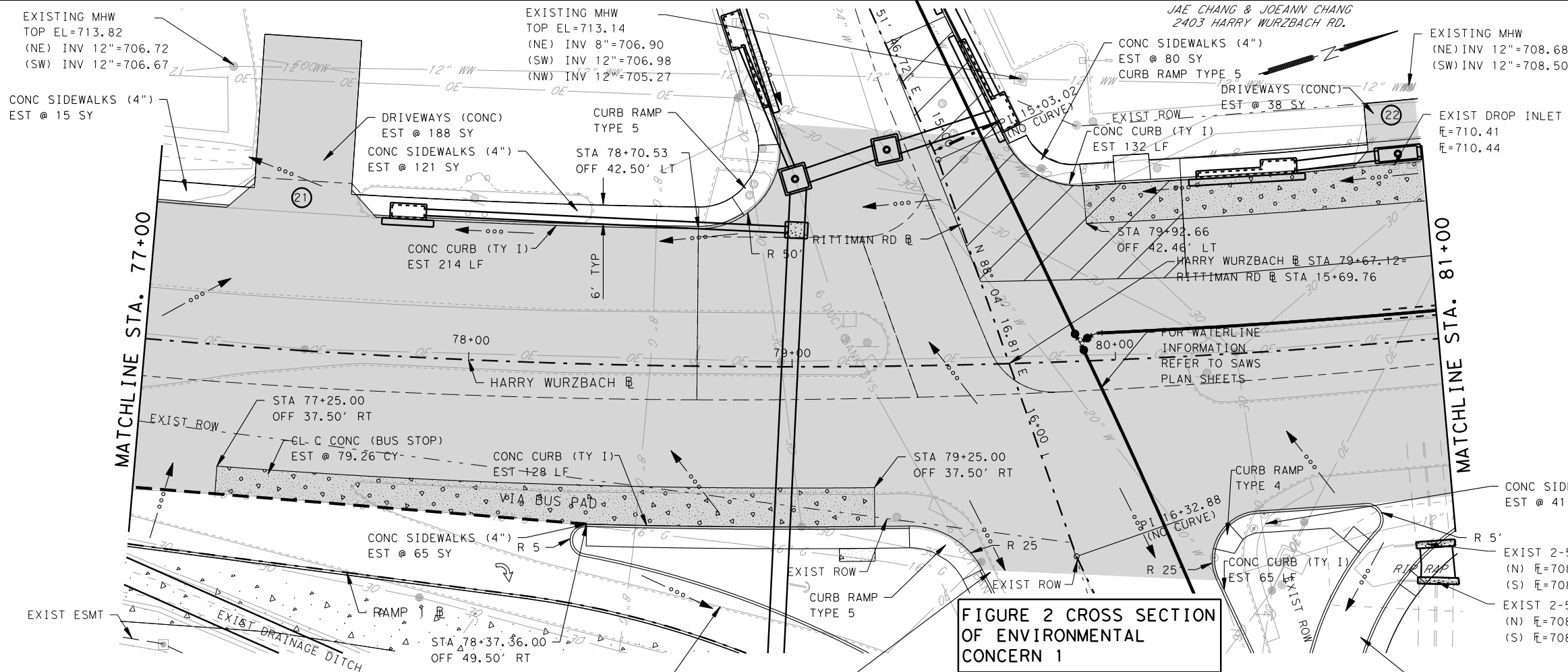
RITTIMAN RD. &amp; HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 149









### PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

### PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @	
GUTTER E LEFT	
GUTTER E RIGHT	



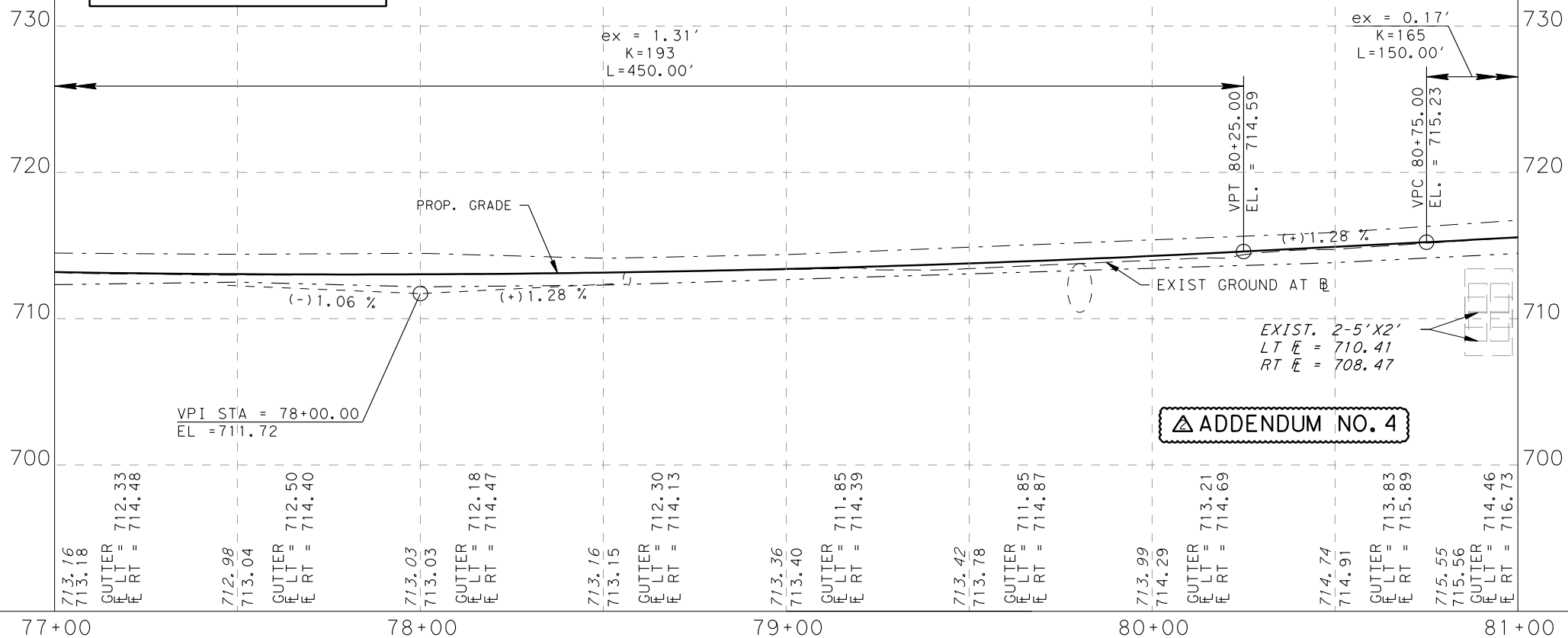
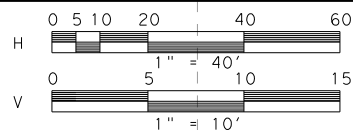
**FIGURE 2 CROSS SECTION OF ENVIRONMENTAL CONCERN 1**

FOR CROSS SECTION OF THE IMPACTED AREAS SEE SHEET 3

SEE SHEET 159 FOR RAMP 1 PLAN & PROFILE

SEE SHEET 157 FOR RITTIMAN RD PLAN & PROFILE

SEE SHEET 166 FOR RAMP 2 PLAN & PROFILE



### CSJ 915-12-480

#### SHEET TOTALS

DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	4.00
EXCAVATION (ROADWAY)	CY	594.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL) (ORD COMP) (TY A)	CY	4,854.89
LIME (HYDRATED LIME (SLURRY))	TON	65.54
LIME TRT (EXST MATL) (6")	SY	4,854.89
ASPH (AC-5 OR 10, CRS/HFRS-2, RS/CRS-1P)	GAL	1,405.77
AGGR (TY-PB GR-4)	CY	46.86
D-GR HMA (METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA (QCQA) TY-B PG64-22	TON	3,142.85
D-GR HMA (QCQA) TY-C PG64-22	TON	515.45
PLANE ASPH CONC PAV (0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	79.26
RIPRAP (CONC) (4 IN)	CY	2.07
CONC CURB (TY I)	LF	539.00
DRIVEWAYS (CONC)	SY	256.00
CURB RAMPS (TY 4)	EA	1.00
CURB RAMPS (TY 5)	EA	3.00
CONC SIDEWALK (4")	SY	287.00
CONC DIRECTIONAL ISLAND	SY	0.00

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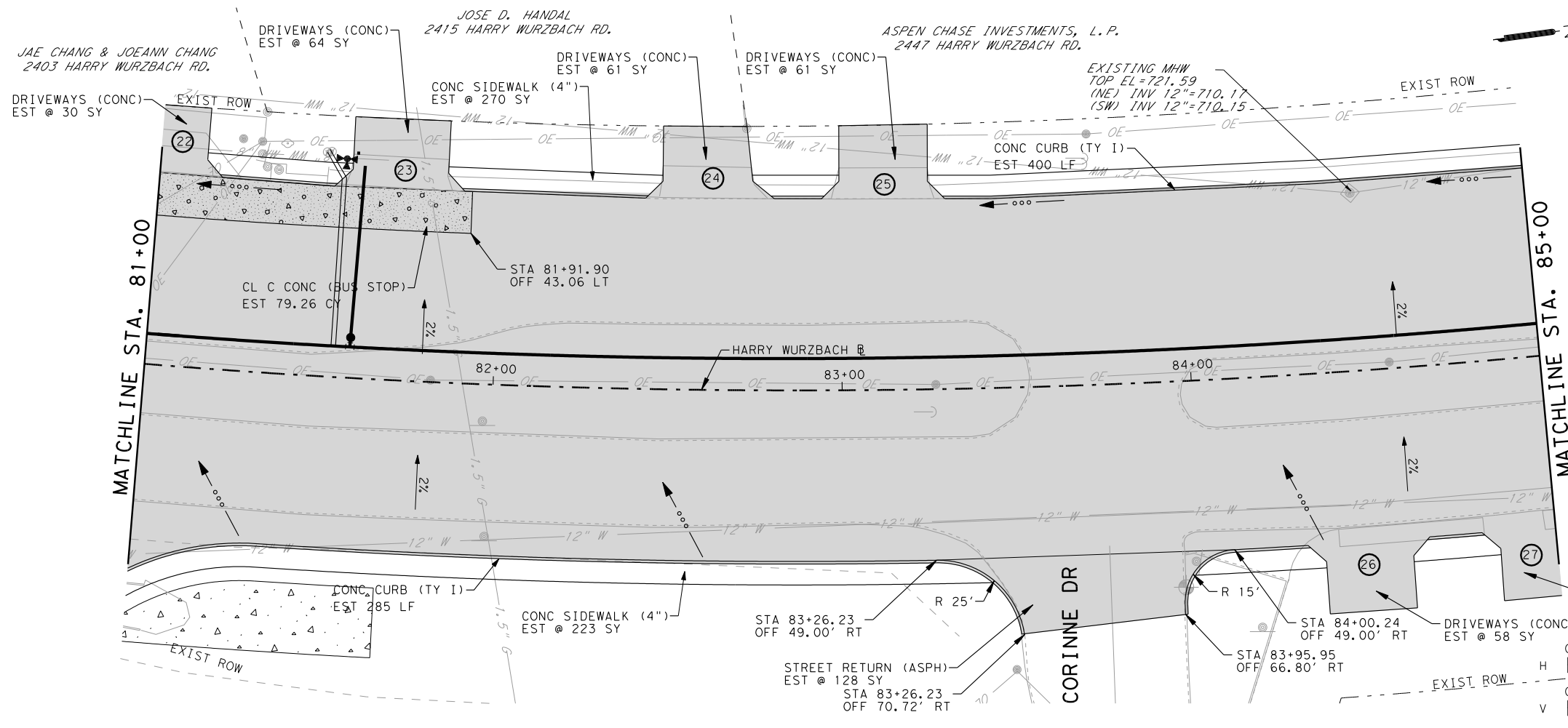
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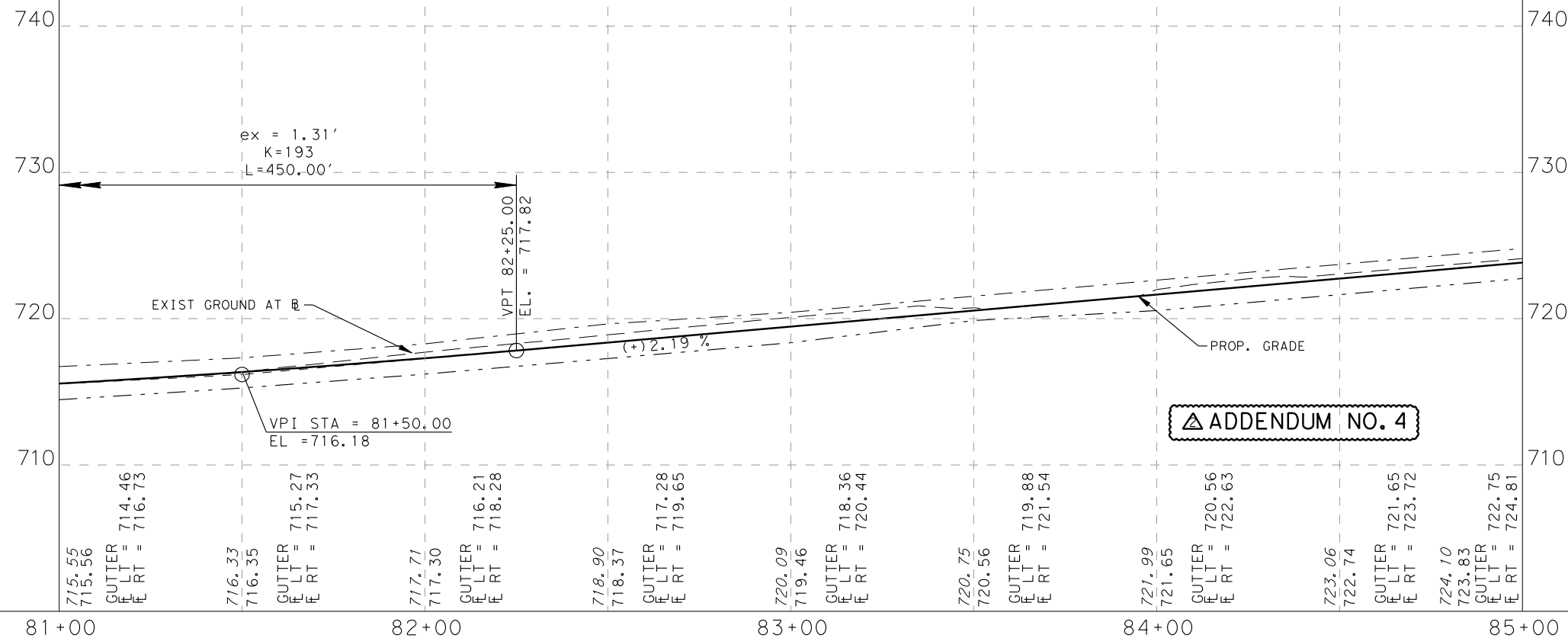
3 OF 5

CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT FORT SAM HOUSTON TRANSPORTATION PROJECTS		
PLAN AND PROFILE RITTIMAN RD. & HARRY WURZBACH INTERSECTION		
FINAL SUBMITTAL	PROJECT NO.: 915-12-470, etc	DATE: 8/22/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 151





<u>PLAN VIEW LEGEND</u>	
PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	
<u>PROFILE VIEW LEGEND</u>	
PROPOSED GRADE	
EXISTING GROUND @ 1/2"	
GUTTER 1/2" LEFT	
GUTTER 1/2" RIGHT	



SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	4.00
EXCAVATION (ROADWAY)	CY	170.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	4,939.67
LIME (HYDRATED LIME (SLURRY))	TON	66.69
LIME TRT (EXST MATL) (6")	SY	4,939.67
ASPH(AC-5 OR 10 CRS/HFRS-2,RS/CRS-1P)	GAL	1,420.80
AGGR (TY-PB GR-4)	CY	47.36
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA(QCQA) TY-B PG64-22	TON	3,215.67
D-GR HMA(QCQA) TY-C PG64-22	TON	520.96
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	79.26
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	685.00
DRIVEWAYS (CONC)	SY	305.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	493.00
CONC DIRECTIONAL ISLAND	SY	0.00

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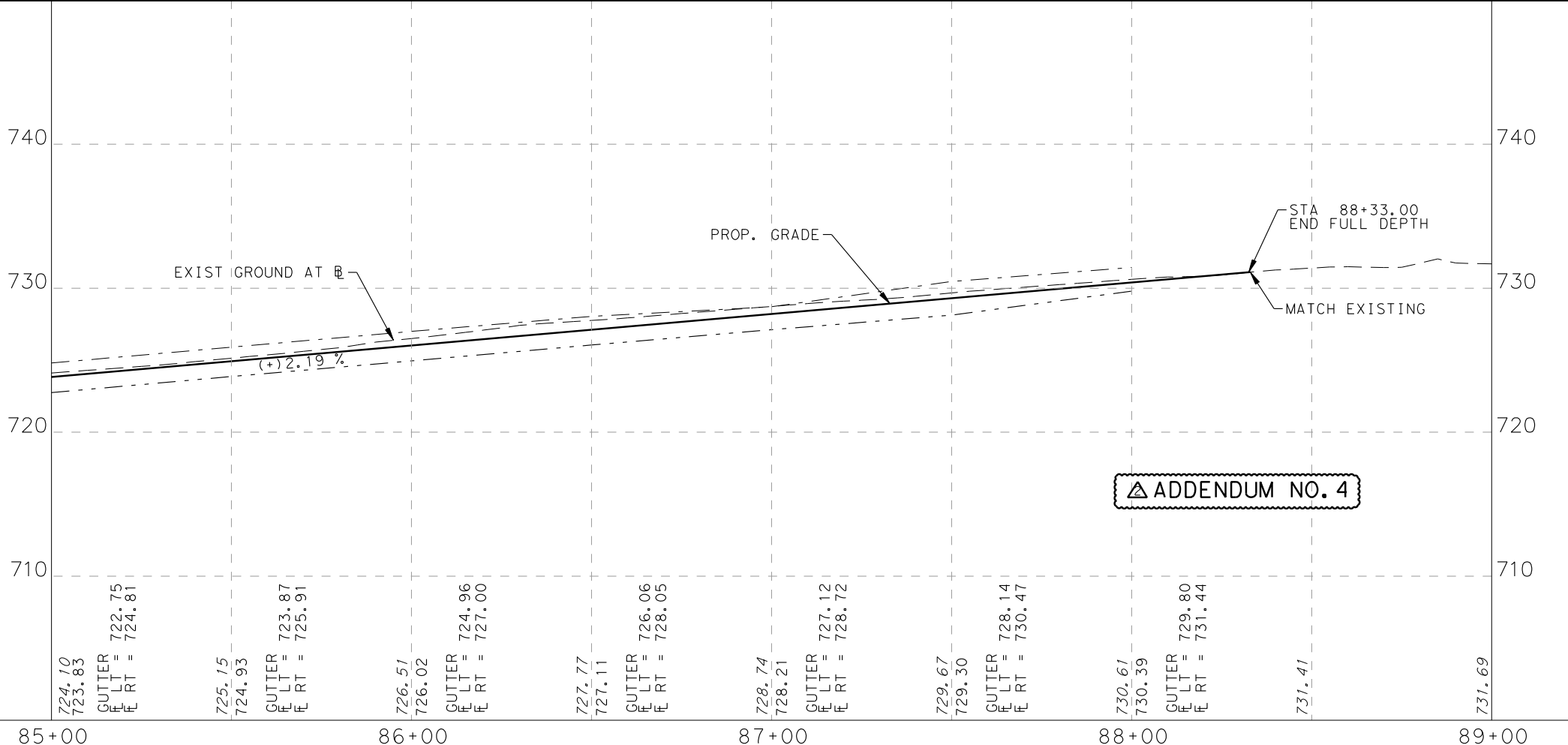
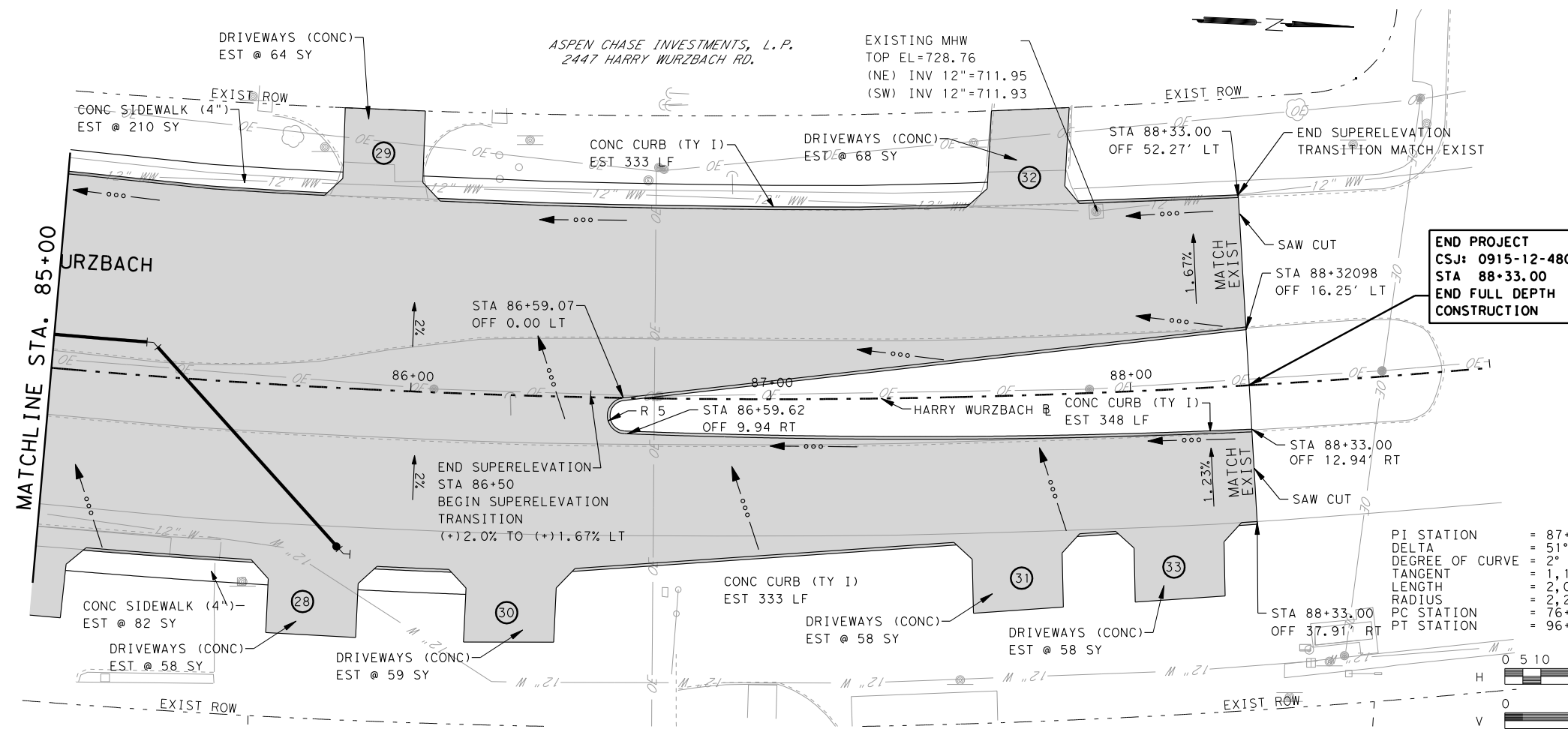
CITY OF SAN ANTONIO	
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT	
FORT SAM HOUSTON TRANSPORTATION PROJECTS	

## PLAN AND PROFILE

RITTIMAN RD. &amp; HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc		DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE	SHEET NO.: 152





CSJ 915-12-480

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	3.32
EXCAVATION (ROADWAY)	CY	61.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL ORD COMP) (TY A)	CY	3,464.44
LIME (HYDRATED LIME (SLURRY))	TON	46.77
LIME TRT (EXST MATL) (6")	SY	3,464.44
ASPH(AC-5 OR 10 CRS/HFRS-2,RS/CRS-1P)	GAL	961.10
AGGR (TY-PB GR-4)	CY	32.04
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA(QCQA) TY-B PG64-22	TON	2,245.49
D-GR HMA(QCQA) TY-C PG64-22	TON	352.40
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	1,014.00
DRIVEWAYS (CONC)	SY	366.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	292.00
CONC DIRECTIONAL ISLAND	SY	0.00

5 OF 5

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CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

FORT SAM HOUSTON TRANSPORTATION PROJECTS

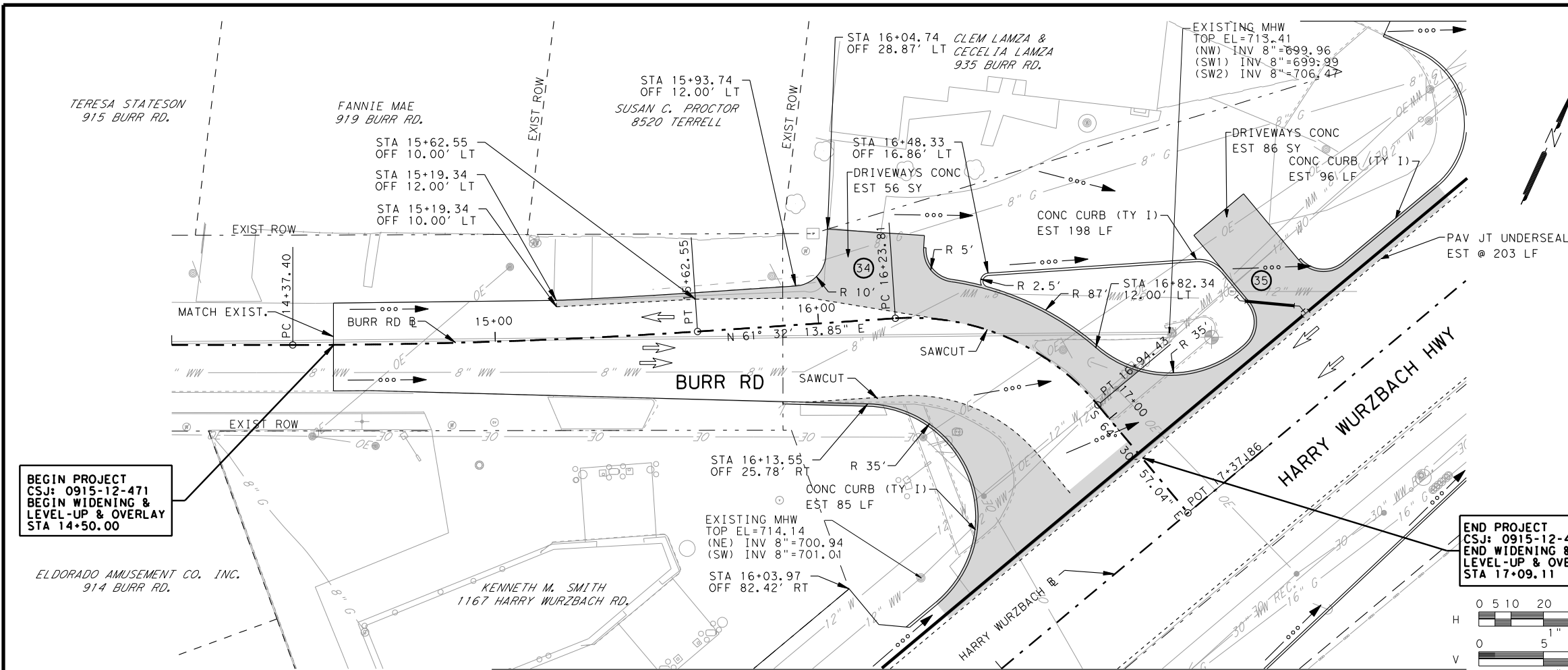
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RIITIMAN RD. & HARRY WURZBACH INTERSECTION

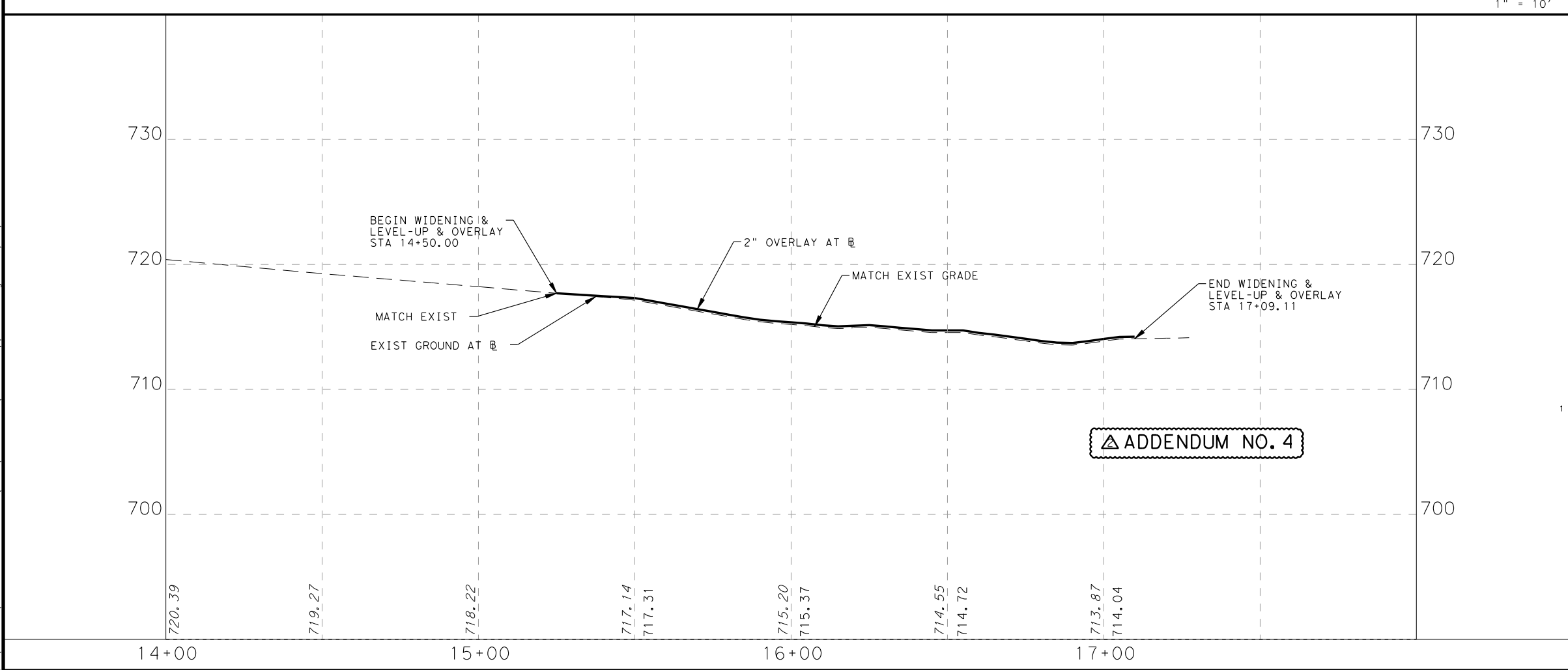
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DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 153



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- PLAN VIEW LEGEND**
- PROPOSED CURB
  - FULL DEPTH RECONSTRUCTION
  - LEVEL-UP & OVERLAY
  - SAWCUT LINE
  - EXISTING EDGE ROADWAY
  - EXISTING RIGHT OF WAY
  - EXISTING FENCE
  - DRIVE NUMBER
  - ENVIRONMENTAL AREA OF CONCERN
- PROFILE VIEW LEGEND**
- PROPOSED GRADE
  - EXISTING GROUND @
  - GUTTER E LEFT
  - GUTTER E RIGHT



**CSJ 915-12-471**

SHEET TOTALS			
DESCRIPTION	UNIT	TOTAL	
PREPARING ROW	STA	2.60	
EXCAVATION (ROADWAY)	CY	89.00	
SUBGRADE WIDENING (ORD COMP)	STA	2.60	
EMBANKMENT (FINAL) (ORD COMP) (TY A)	CY	145.00	
LIME (HYDRATED LIME (SLURRY))	TON	14.06	
LIME TRT (EXST MATL) (6")	SY	1,041.44	
ASPH (AC-5 OR 10, CRS/HFRS-2, RS/CRS-1P)	GAL	517.53	
AGGR (TY-PB GR-4)	CY	17.25	
D-GR HMA (METH) TY-B PG64-22 (LEVEL UP)	TON	0.00	
D-GR HMA (QCQA) TY-B PG64-22	TON	656.77	
D-GR HMA (QCQA) TY-C PG64-22	TON	189.76	
PLANE ASPH CONC PAV (0" TO 2")	SY	0.00	
PAV JT UNDERSEAL (48")	LF	203.00	
CL C CONC (BUS STOP)	CY	0.00	
RIPRAP (CONC) (4 IN)	CY	0.00	
CONC CURB (TY I)	LF	379.00	
DRIVEWAYS (CONC)	SY	145.00	
CURB RAMPS (TY 4)	EA	0.00	
CURB RAMPS (TY 5)	EA	0.00	
CONC SIDEWALK (4")	SY	0.00	
CONC DIRECTIONAL ISLAND	SY	0.00	

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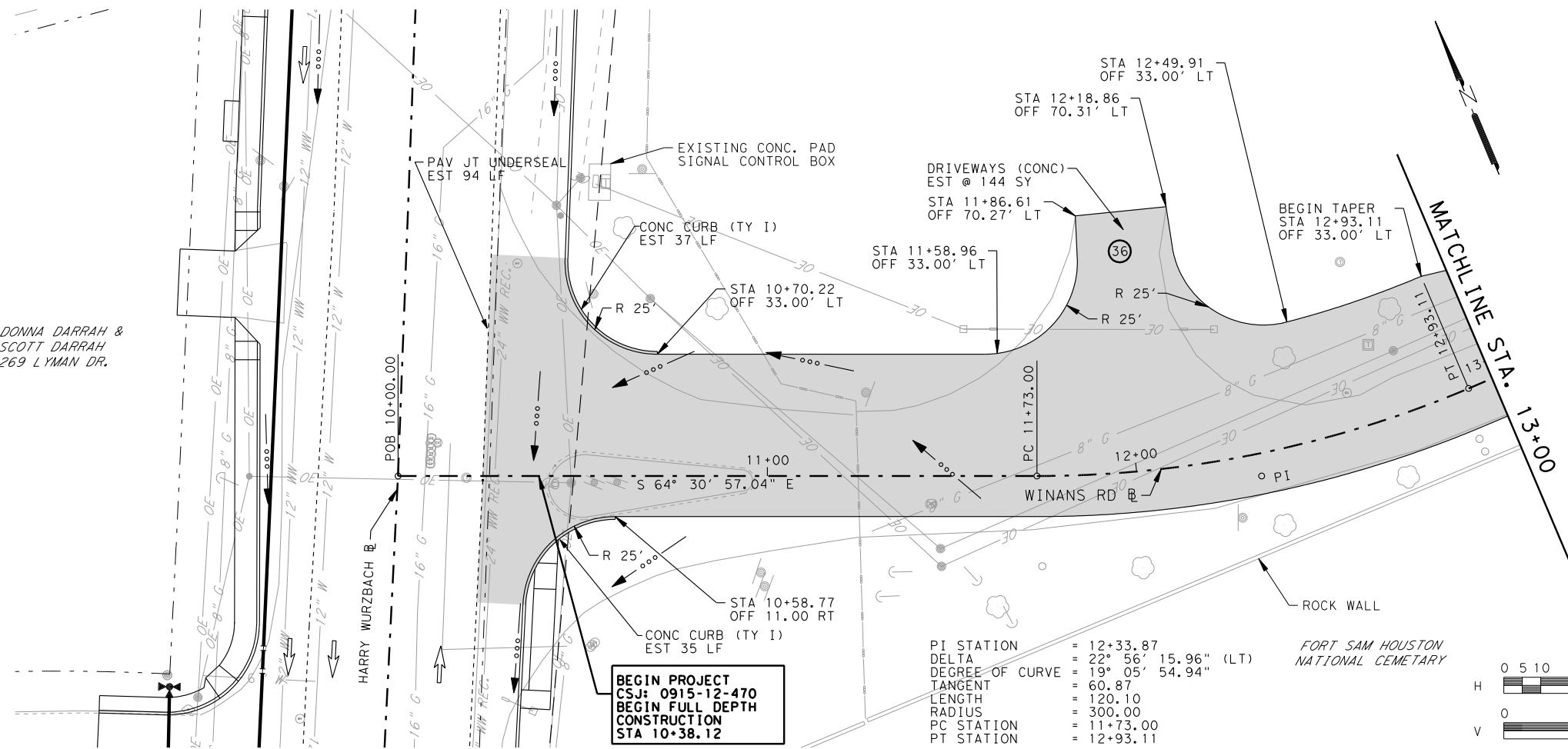
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BURR RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470, etc	DATE: 8/21/2011
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		SHEET NO.: 154



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LADONNA DARRAH &  
SCOTT DARRAH  
269 LYMAN DR.

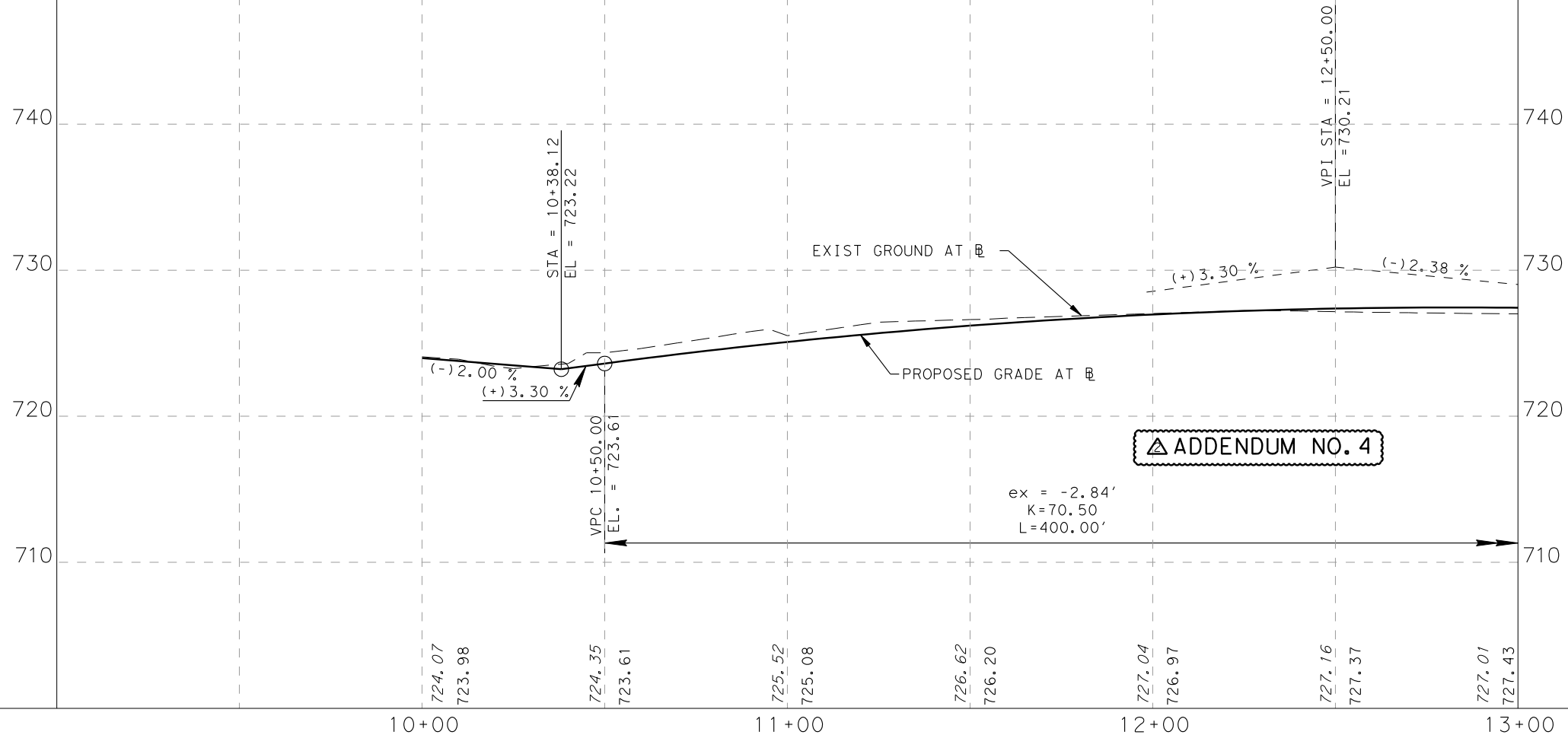


### PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

### PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @ E	
GUTTER E LEFT	
GUTTER E RIGHT	



### CSJ 915-12-470

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	2.80
EXCAVATION (ROADWAY)	CY	46.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL) (ORD COMP) (TYA)	CY	699.00
LIME (HYDRATED LIME (SLURRY))	TON	21.10
LIME TRT (EXST MATL) (6")	SY	1,563.22
ASPH(AC-5 OR 10 CRS/HFRS-2,RS/CRS-1P)	GAL	465.80
AGGR (TY-PB GR-4)	CY	15.53
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA(QCQA) TY-B PG64-22	TON	1,009.32
D-GR HMA(QCQA) TY-C PG64-22	TON	170.79
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	94.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	72.00
DRIVEWAYS (CONC)	SY	145.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	0.00
CONC DIRECTIONAL ISLAND	SY	0.00

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Texas Department  
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### CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

FORT SAM HOUSTON TRANSPORTATION PROJECTS

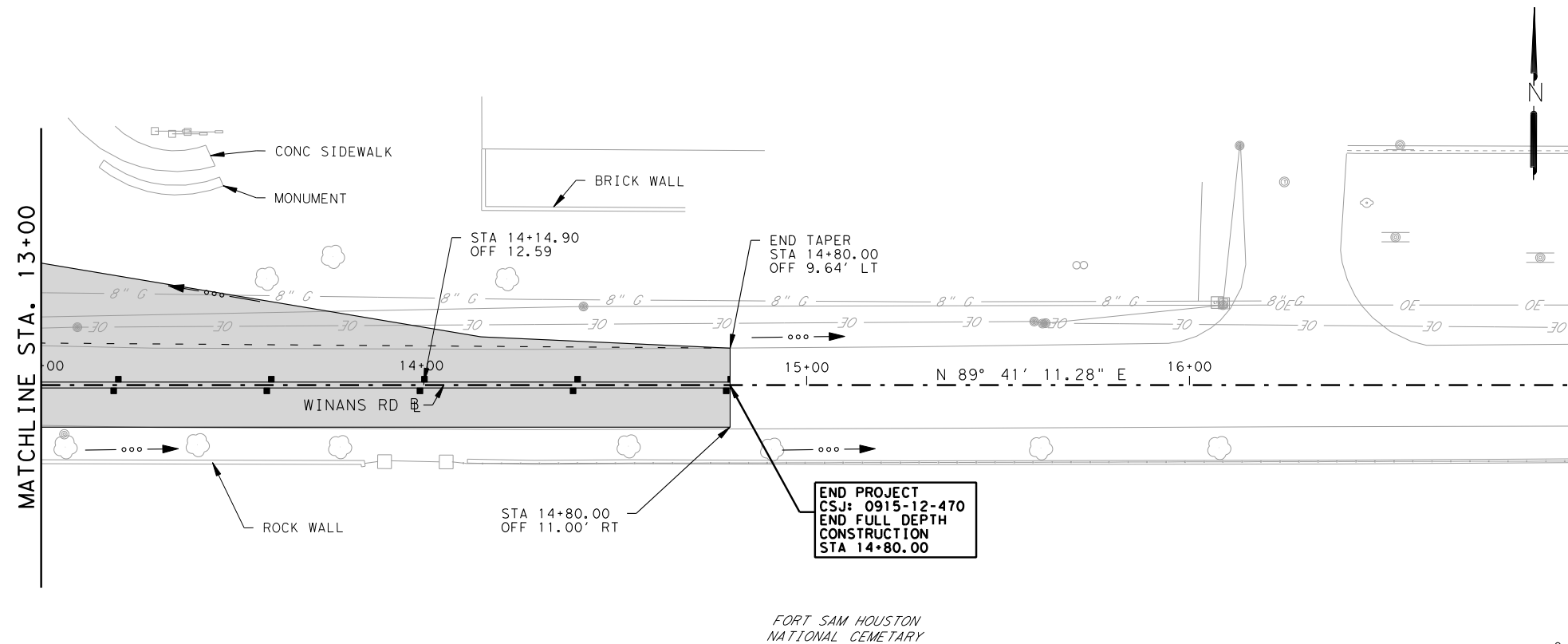
### PLAN AND PROFILE

WINANS RD. & HARRY WURZBACH INTERSECTION

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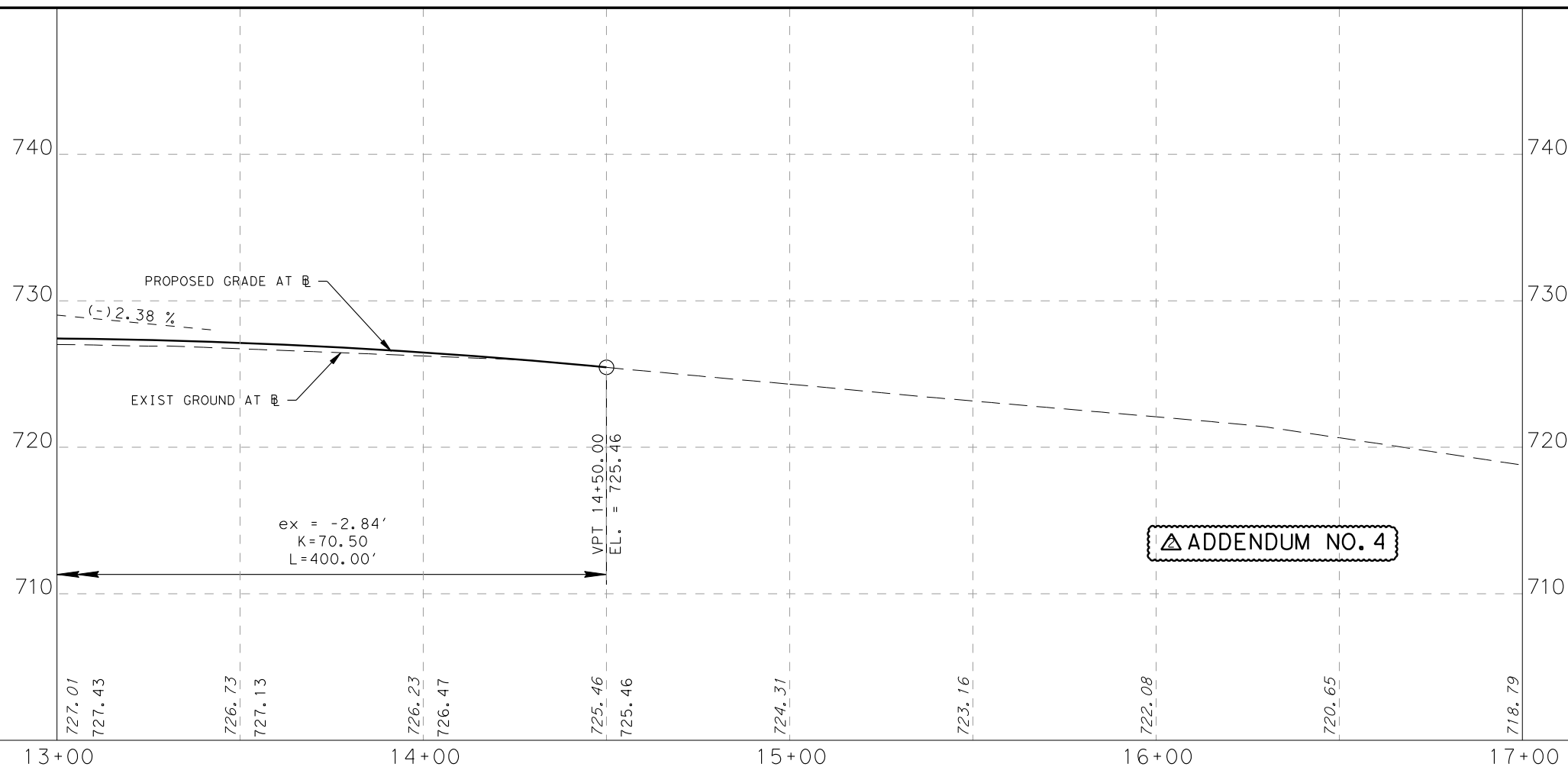
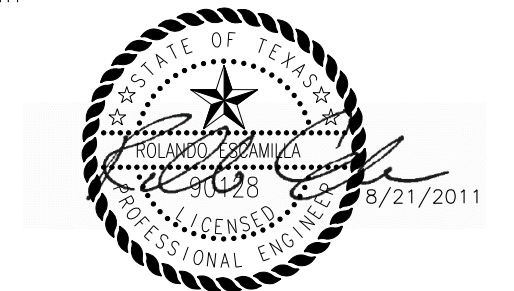
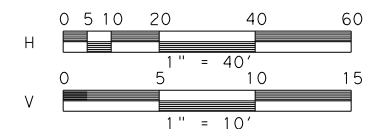


## PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	#
ENVIRONMENTAL AREA OF CONCERN	

## PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @ E	
GUTTER E LEFT	
GUTTER E RIGHT	



2 OF 2

ADDENDUM NO. 4

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	1.80
EXCAVATION (ROADWAY)	CY	7.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL (ORD COMP) (TYA)	CY	202.00
LIME (HYDRATED LIME (SLURRY))	TON	9.38
LIME TRT (EXST MATL) (6")	SY	694.78
ASPH (AC-5 OR 10, CRS/HFRS-2, RS/CRS-1P)	GAL	191.30
AGGR (TY-PB GR-4)	CY	6.38
D-GR HMA (METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA (QCQA) TY-B PG64-22	TON	438.42
D-GR HMA (QCQA) TY-C PG64-22	TON	70.14
PLANE ASPH CONC PAV (0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC) (4 IN)	CY	0.00
CONC CURB (TY I)	LF	0.00
DRIVEWAYS (CONC)	SY	0.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	0.00
CONC DIRECTIONAL ISLAND	SY	0.00

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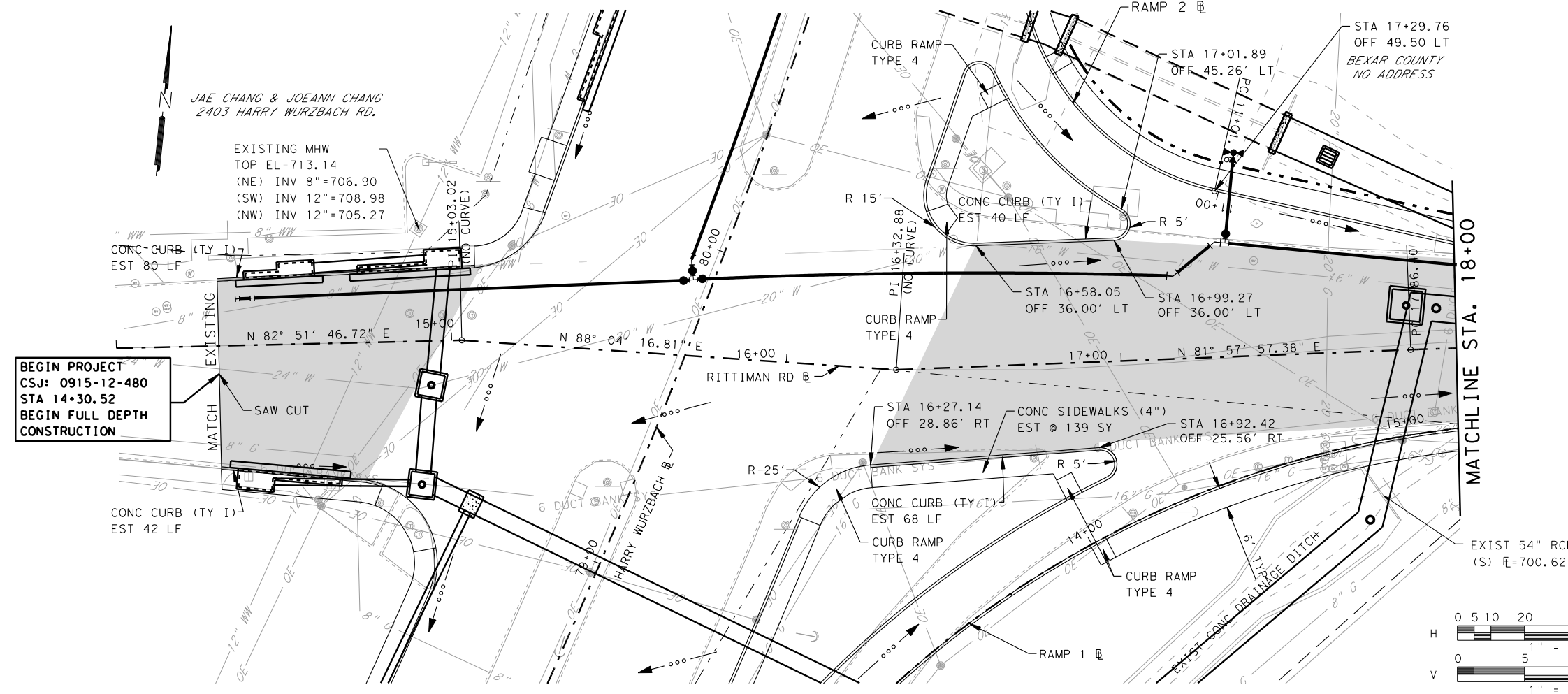
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CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
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WINANS RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL PROJECT NO.: 915-12-470, etc DATE: 8/21/2011  
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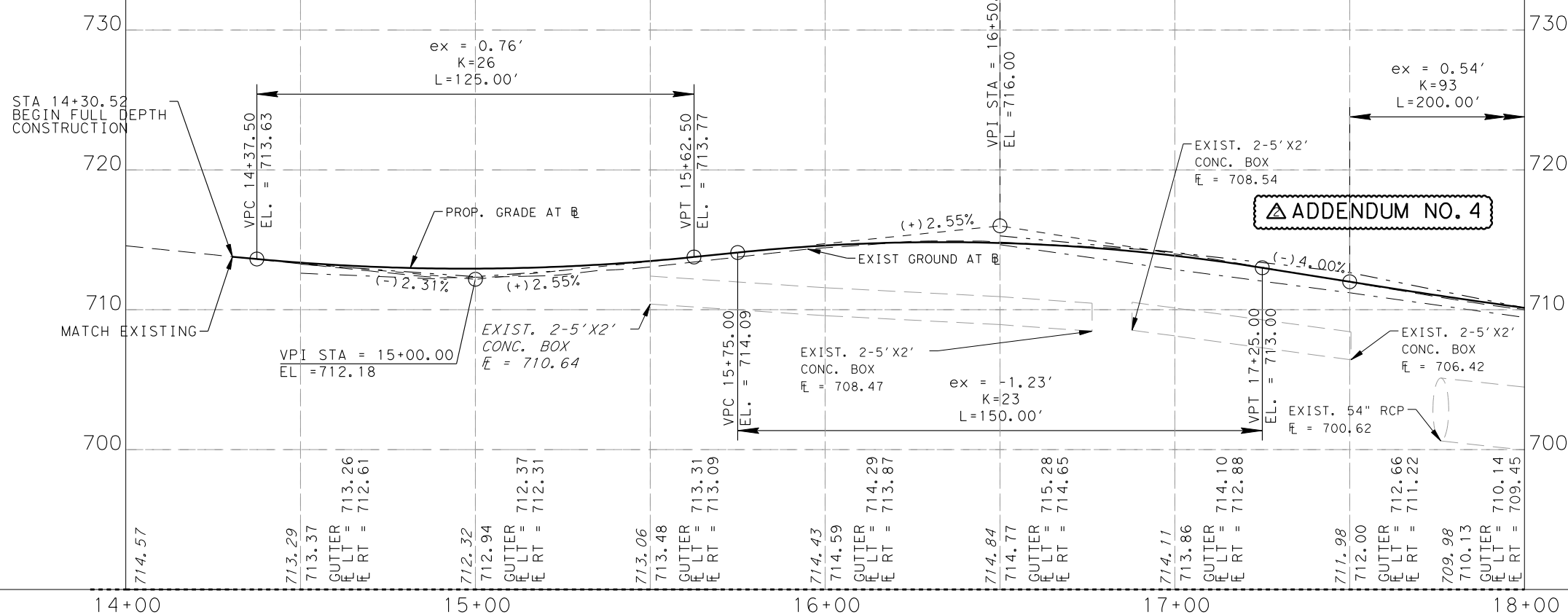


## PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

## PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @	
GUTTER @ LEFT	
GUTTER @ RIGHT	



1 OF 5

## CSJ 915-12-480

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	2.26
EXCAVATION (ROADWAY)	CY	572.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL)(ORD COMP)(TYA)	CY	1,061.00
LIME (HYDRATED LIME (SLURRY))	TON	19.69
LIME TRT (EXST MATL) (6")	SY	1,458.78
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	422.23
AGGR (TY-PB GR-4)	CY	14.07
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA(QCQA) TY-B PG64-22	TON	0.00
D-GR HMA(QCQA) TY-C PG64-22	TON	154.82
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	276.00
DRIVEWAYS (CONC)	SY	0.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	139.00
CONC DIRECTIONAL ISLAND	SY	0.00

**TETRA TECH**  
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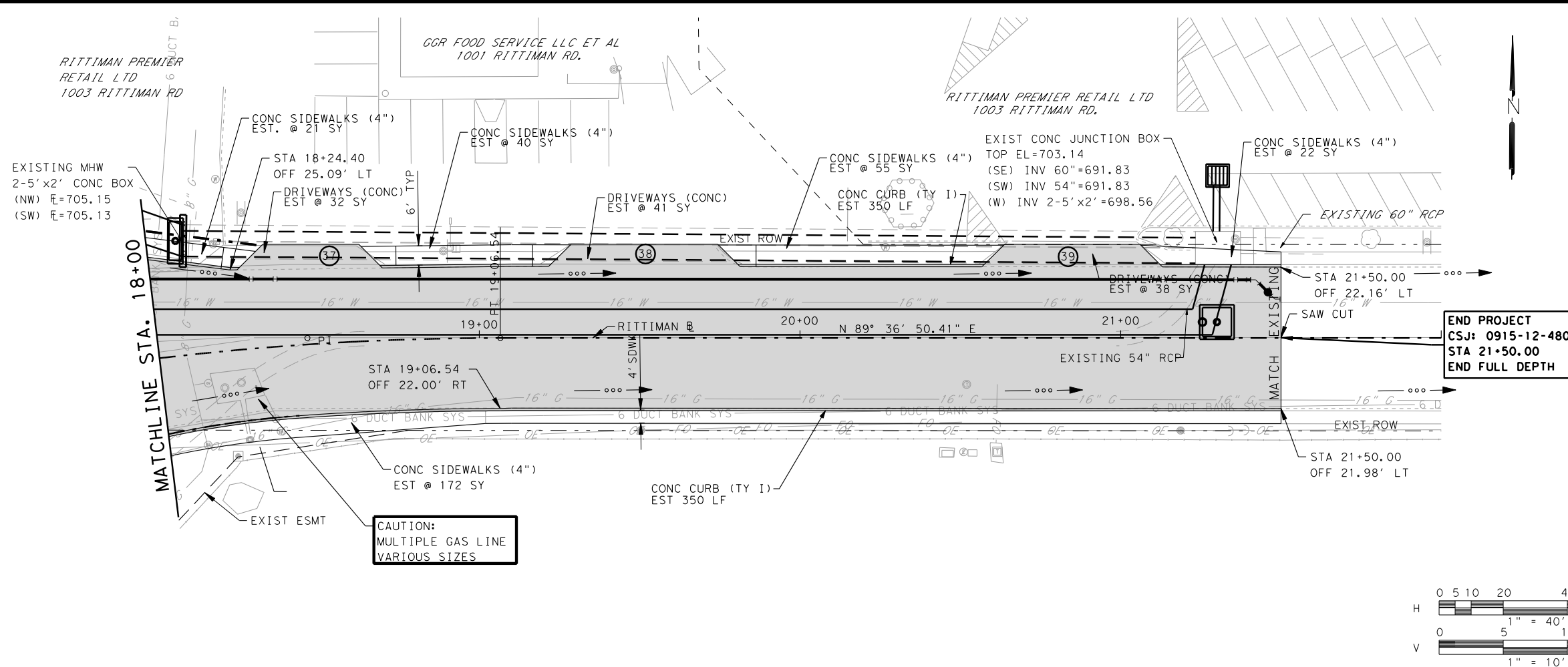
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FORT SAM HOUSTON TRANSPORTATION PROJECTS

**PLAN AND PROFILE**  
RITTIMAN RD. & HARRY WURZBACH INTERSECTION

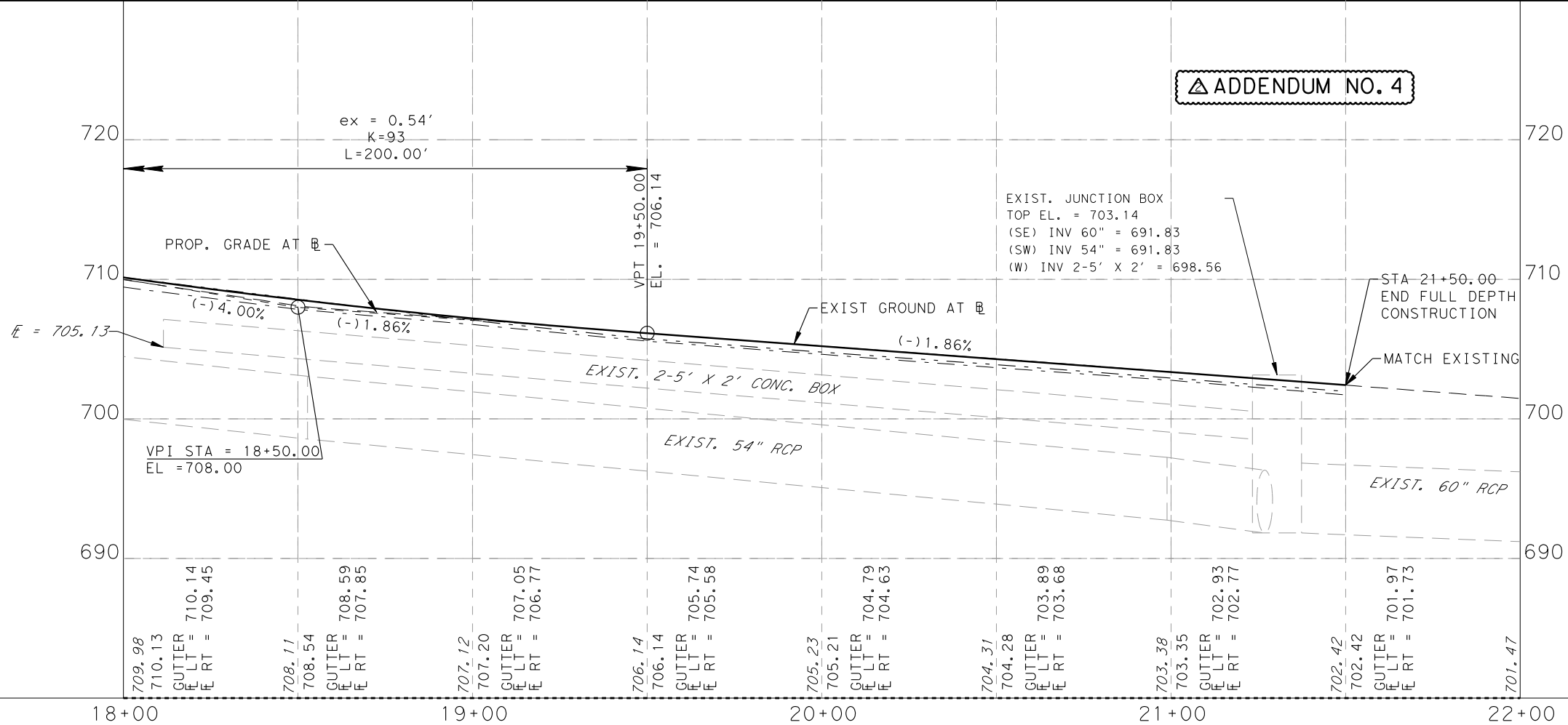
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- PLAN VIEW LEGEND**
- PROPOSED CURB
  - FULL DEPTH RECONSTRUCTION
  - LEVEL-UP & OVERLAY
  - SAWCUT LINE
  - EXISTING EDGE ROADWAY
  - EXISTING RIGHT OF WAY
  - EXISTING FENCE
  - DRIVE NUMBER
  - ENVIRONMENTAL AREA OF CONCERN
- PROFILE VIEW LEGEND**
- PROPOSED GRADE
  - EXISTING GROUND @
  - GUTTER E LEFT
  - GUTTER E RIGHT



CSJ 915-12-480		
SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	3.50
EXCAVATION (ROADWAY)	CY	221.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	678.00
LIME (HYDRATED LIME (SLURRY))	TON	26.00
LIME TRT (EXST MATL) (6")	SY	1,925.67
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	523.63
AGGR (TY-PB GR-4)	CY	17.45
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA(QCQA) TY-B PG64-22	TON	1,230.68
D-GR HMA(QCQA) TY-C PG64-22	TON	192.00
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC)(4 IN)	CY	0.00
CONC CURB (TY I)	LF	700.00
DRIVEWAYS (CONC)	SY	113.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	310.00
CONC DIRECTIONAL ISLAND	SY	0.00

2 OF 5

TETRA TECH

TBPE F-3924

700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205

TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRA TECH.COM

Texas Department of Transportation

CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

FORT SAM HOUSTON TRANSPORTATION PROJECTS

PLAN AND PROFILE

RITTIMAN RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL

PROJECT NO.: 915-12-470,etc

DATE: 8/21/2011

DRWN. BY: RPR

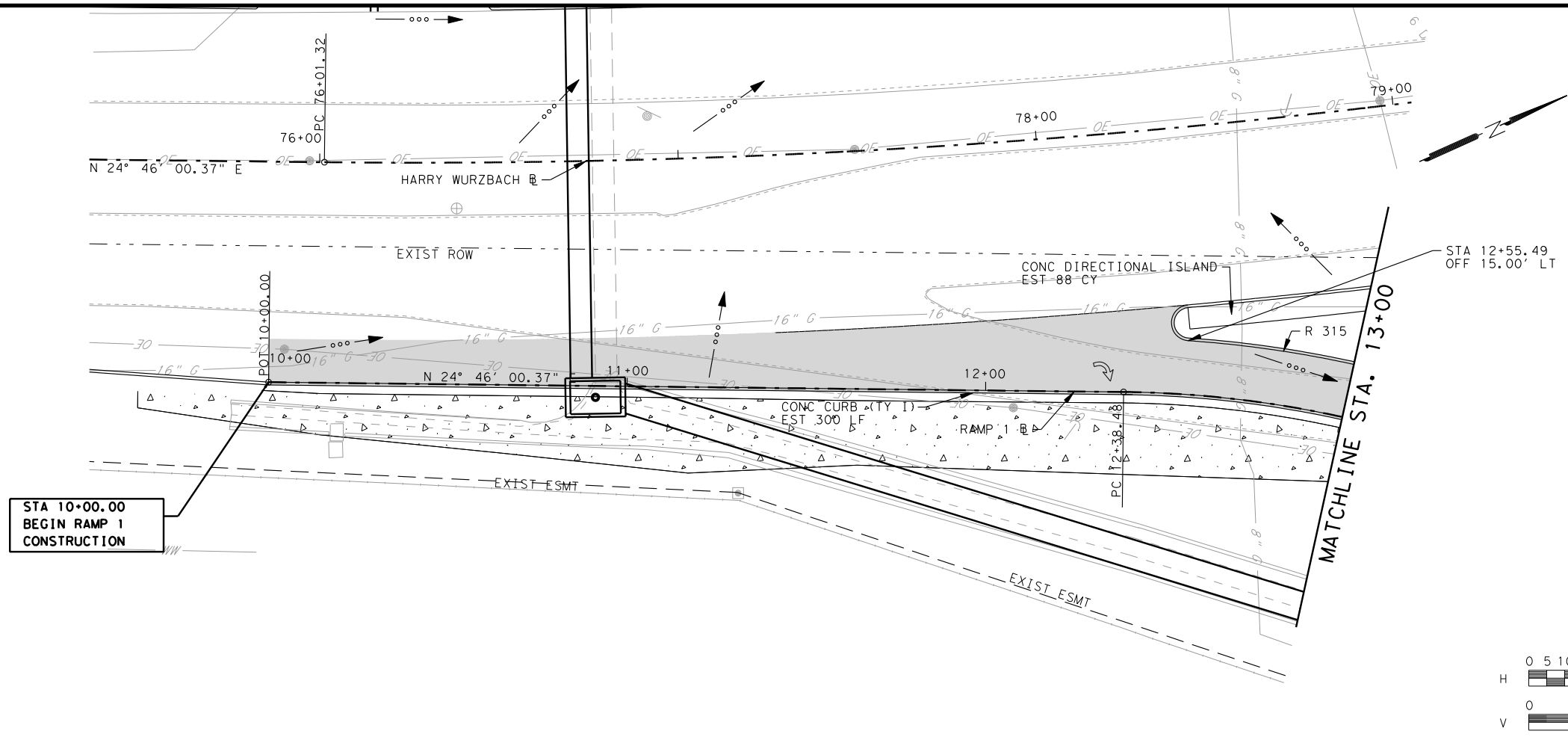
DSGN. BY: JDH

CHKD. BY: RE

SHEET NO.: 158



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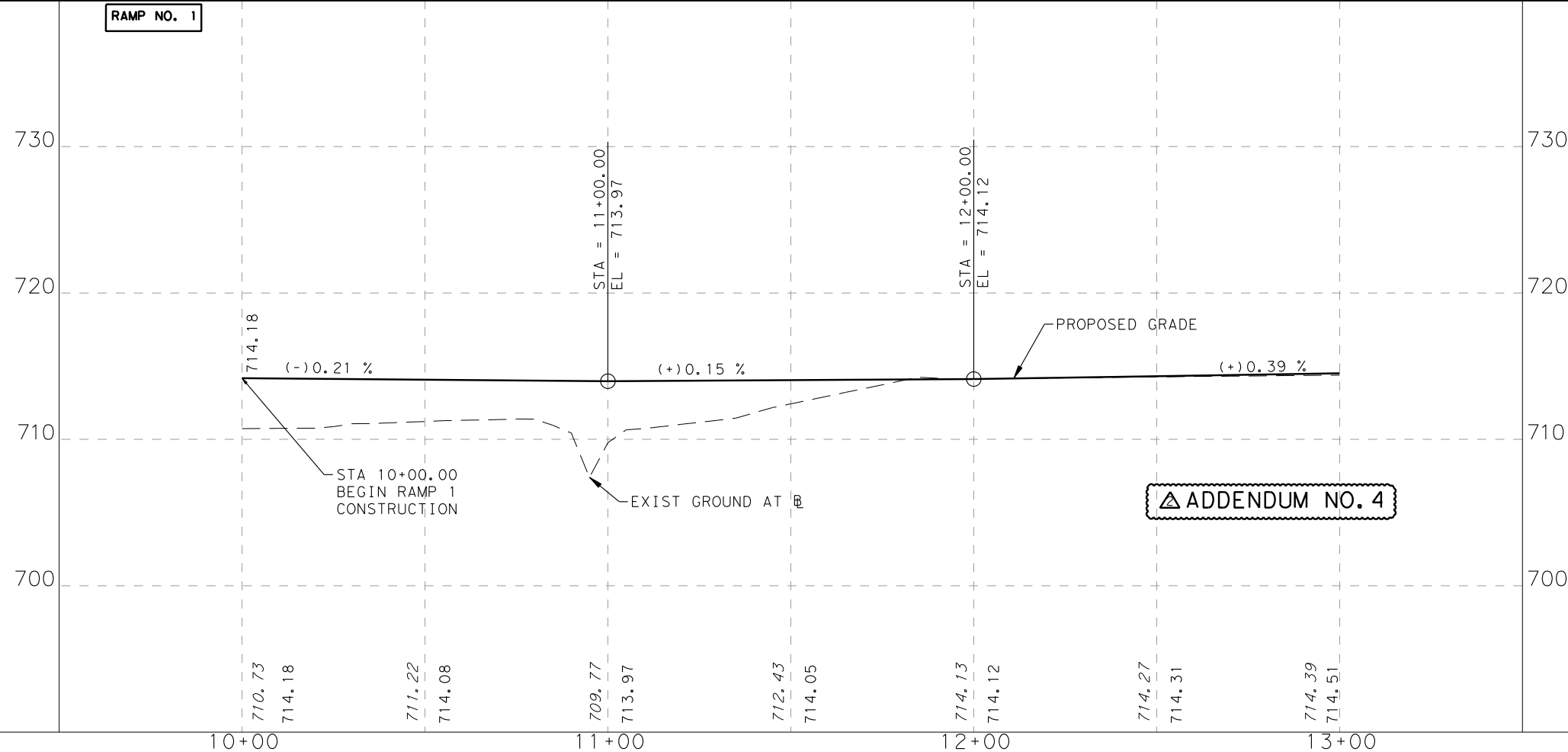
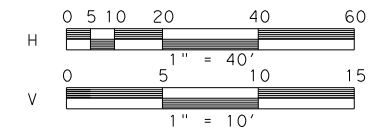


### PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

### PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @	
GUTTER @ LEFT	
GUTTER @ RIGHT	



### CSJ 915-12-480

SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
PREPARING ROW	STA	3.00
EXCAVATION (ROADWAY)	CY	0.00
SUBGRADE WIDENING (ORD COMP)	STA	0.00
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	0.00
LIME (HYDRATED LIME (SLURRY))	TON	6.28
LIME TRT (EXST MATL) (6")	SY	465.44
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	120.13
AGGR (TY-PB GR-4)	CY	4.00
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00
D-GR HMA(QCQA) TY-B PG64-22	TON	292.82
D-GR HMA(QCQA) TY-C PG64-22	TON	44.05
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00
PAV JT UNDERSEAL (48")	LF	0.00
CL C CONC (BUS STOP)	CY	0.00
RIPRAP (CONC)(4 IN)	CY	2.07
CONC CURB (TY I)	LF	355.00
DRIVEWAYS (CONC)	SY	0.00
CURB RAMPS (TY 4)	EA	0.00
CURB RAMPS (TY 5)	EA	0.00
CONC SIDEWALK (4")	SY	0.00
CONC DIRECTIONAL ISLAND	SY	88.00

3 OF 5

### TETRA TECH

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CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

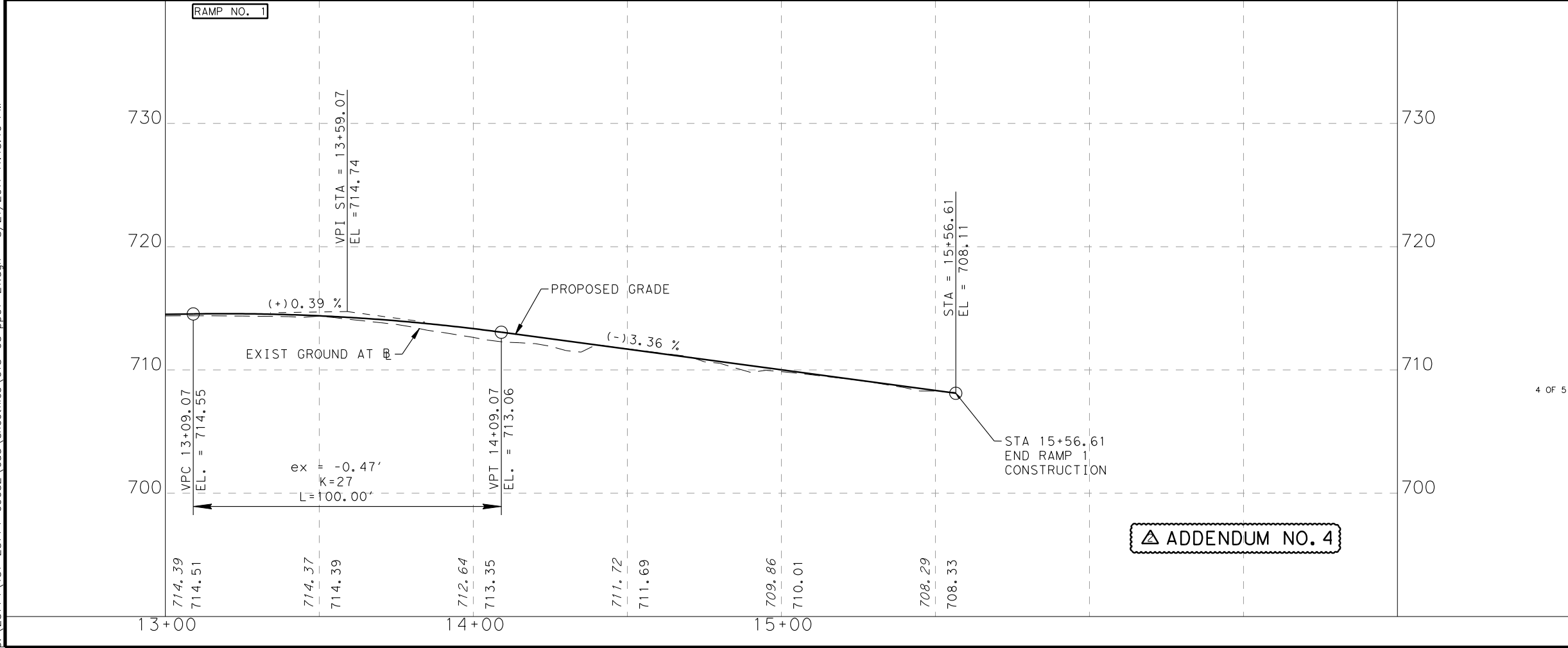
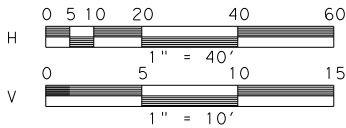
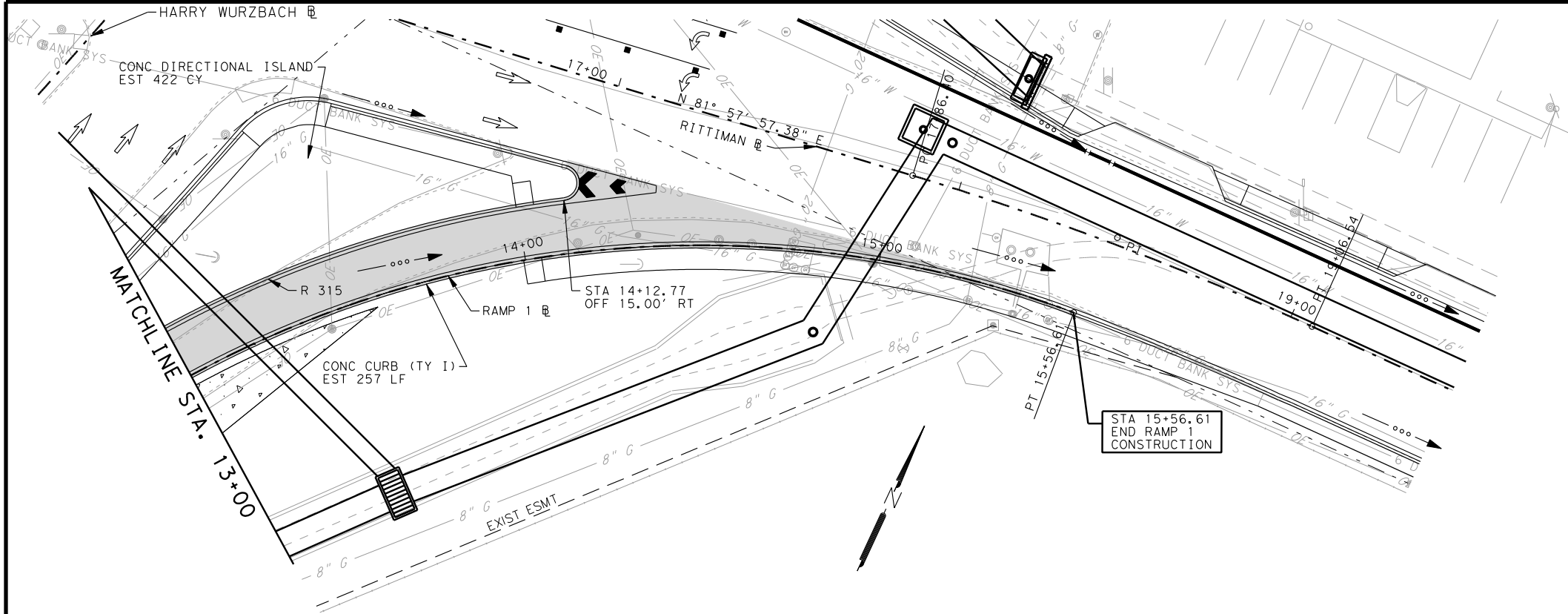
FORT SAM HOUSTON TRANSPORTATION PROJECTS

### PLAN AND PROFILE

RITTIMAN RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 159





CSJ 915-12-480			
SHEET TOTALS			
DESCRIPTION	UNIT	TOTAL	
PREPARING ROW	STA	2.57	
EXCAVATION (ROADWAY)	CY	0.00	
SUBGRADE WIDENING (ORD COMP)	STA	0.00	
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	0.00	
LIME (HYDRATED LIME (SLURRY))	TON	5.55	▲
LIME TRT (EXST MATL) (6")	SY	411.33	
ASPH(AC-5 OR 10, CRS/HFRS-2, RS/CRS-1P)	GAL	95.90	
AGGR (TY-PB GR-4)	CY	3.20	
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00	
D-GR HMA(QCQA) TY-B PG64-22	TON	252.57	
D-GR HMA(QCQA) TY-C PG64-22	TON	35.16	
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00	
PAV JT UNDERSEAL (48")	LF	0.00	
CL C CONC (BUS STOP)	CY	0.00	
RIPRAP (CONC)(4 IN)	CY	3.76	
CONC CURB (TY I)	LF	387.00	
DRIVEWAYS (CONC)	SY	0.00	
CURB RAMPS (TY 4)	EA	0.00	
CURB RAMPS (TY 5)	EA	0.00	
CONC SIDEWALK (4")	SY	0.00	
CONC DIRECTIONAL ISLAND	SY	422.00	

4 OF 5

▲ ADDENDUM NO. 4

**TETRA TECH**  
TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
TELEPHONE #: (210) 226-2922 FAX #: (210) 226-8497 WEBSITE: WWW.TETRATECH.COM

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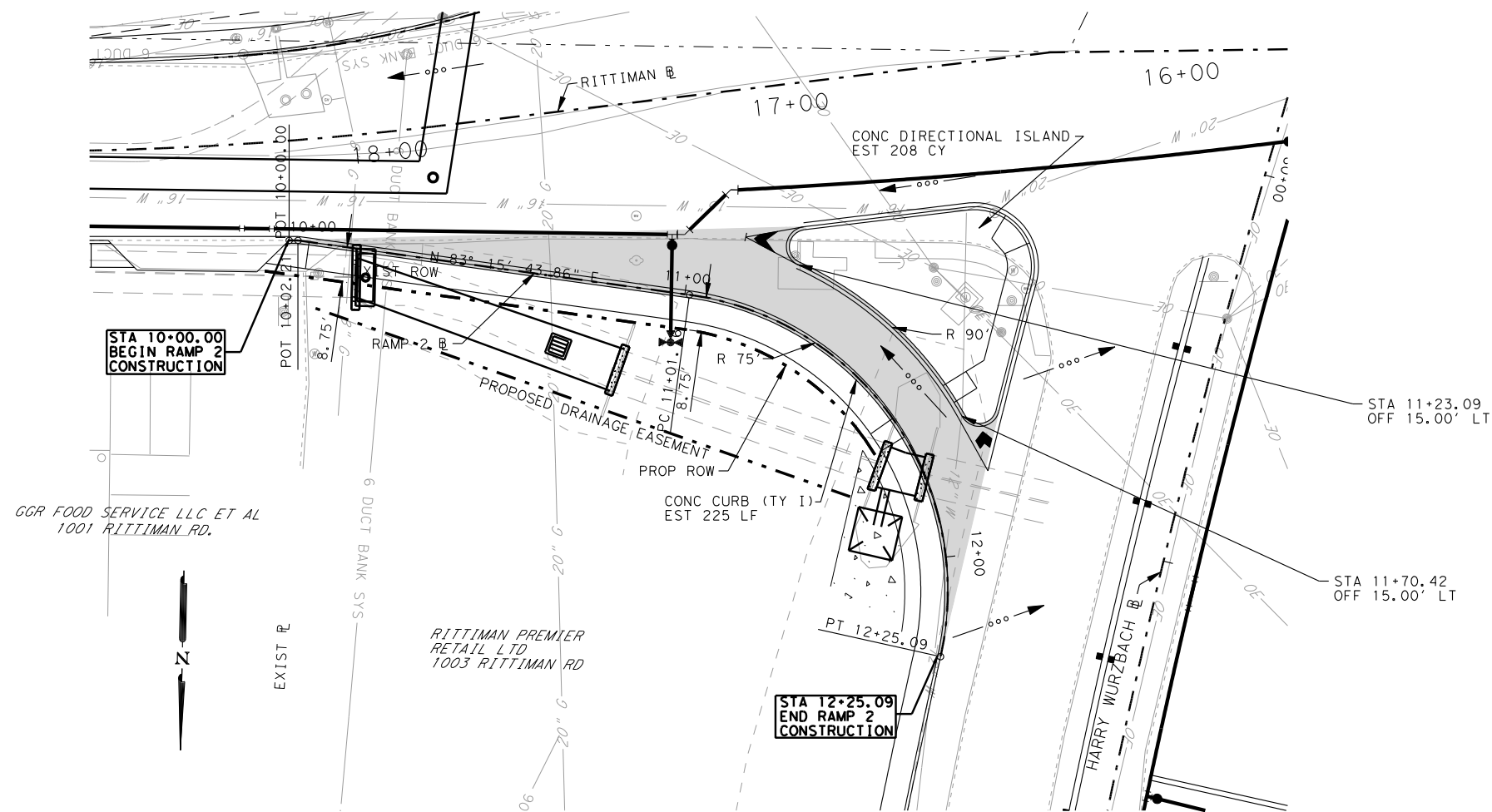
**CITY OF SAN ANTONIO**  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
FORT SAM HOUSTON TRANSPORTATION PROJECTS

**PLAN AND PROFILE**  
RITTIMAN RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL PROJECT NO.: 915-12-470,etc DATE: 8/21/2011  
DRWN. BY: RPR DSGN. BY: JDH CHKD. BY: RE SHEET NO.: 160



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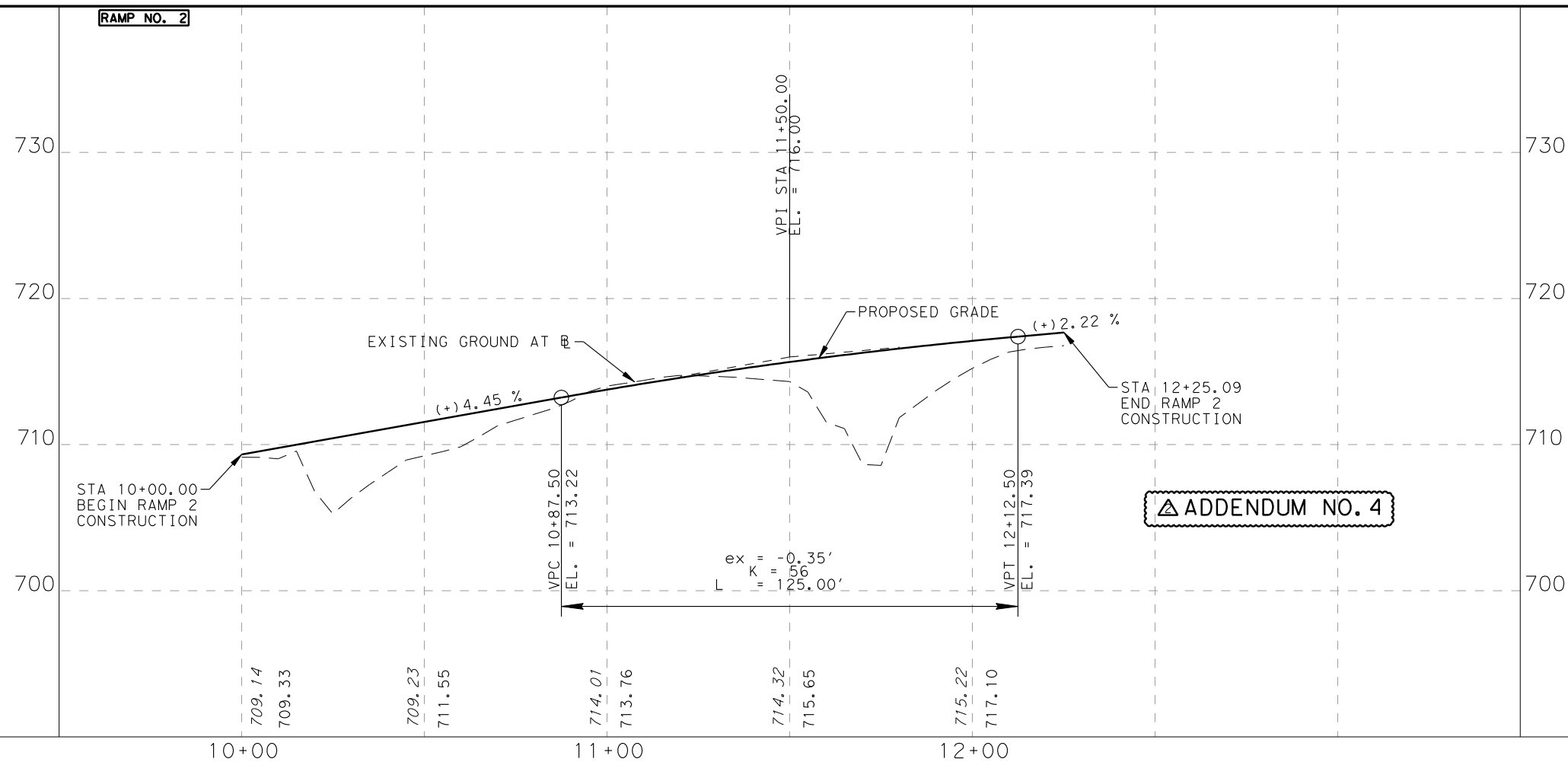
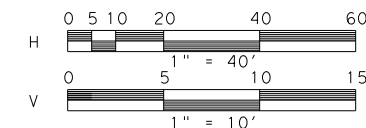


## PLAN VIEW LEGEND

PROPOSED CURB	
FULL DEPTH RECONSTRUCTION	
LEVEL-UP & OVERLAY	
SAWCUT LINE	
EXISTING EDGE ROADWAY	
EXISTING RIGHT OF WAY	
EXISTING FENCE	
DRIVE NUMBER	
ENVIRONMENTAL AREA OF CONCERN	

## PROFILE VIEW LEGEND

PROPOSED GRADE	
EXISTING GROUND @	
GUTTER E LEFT	
GUTTER E RIGHT	



## CSJ 915-12-480

SHEET TOTALS			
DESCRIPTION	UNIT	TOTAL	
PREPARING ROW	STA	2.25	
EXCAVATION (ROADWAY)	CY	0.00	
SUBGRADE WIDENING (ORD COMP)	STA	0.00	
EMBANKMENT (FINAL)(ORD COMP)(TY A)	CY	0.00	
LIME (HYDRATED LIME (SLURRY))	TON	4.85	
LIME TRT (EXST MATL) (6")	SY	359.22	
ASPH(AC-5 OR 10,CRS/HFRS-2,RS/CRS-1P)	GAL	83.80	
AGGR (TY-PB GR-4)	CY	2.79	
D-GR HMA(METH) TY-B PG64-22 (LEVEL UP)	TON	0.00	
D-GR HMA(QCQA) TY-B PG64-22	TON	220.67	
D-GR HMA(QCQA) TY-C PG64-22	TON	30.73	
PLANE ASPH CONC PAV(0" TO 2")	SY	0.00	
PAV JT UNDERSEAL (48")	LF	0.00	
CL C CONC (BUS STOP)	CY	0.00	
RIPRAP (CONC)(4 IN)	CY	0.00	
CONC CURB (TY I)	LF	295.00	
DRIVEWAYS (CONC)	SY	0.00	
CURB RAMPS (TY 4)	EA	0.00	
CURB RAMPS (TY 5)	EA	0.00	
CONC SIDEWALK (4")	SY	0.00	
CONC DIRECTIONAL ISLAND	SY	208.00	

5 OF 5

## TETRA TECH

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Texas Department of Transportation

## CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

FORT SAM HOUSTON TRANSPORTATION PROJECTS

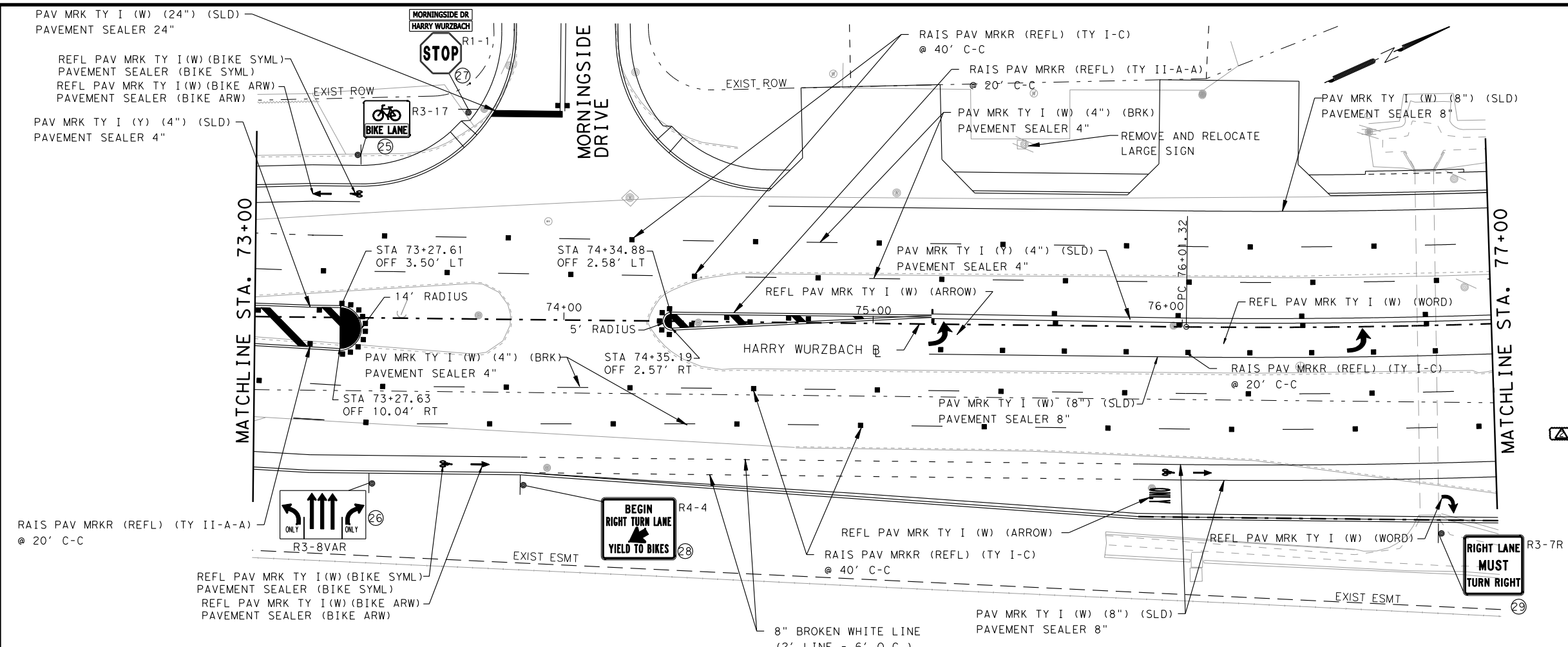
## PLAN AND PROFILE

5 OF 5  
RITTIMAN RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL	PROJECT NO.: 915-12-470,etc	DATE: 8/21/2011
DRWN. BY: RPR	DSGN. BY: JDH	CHKD. BY: RE
		SHEET NO.: 161

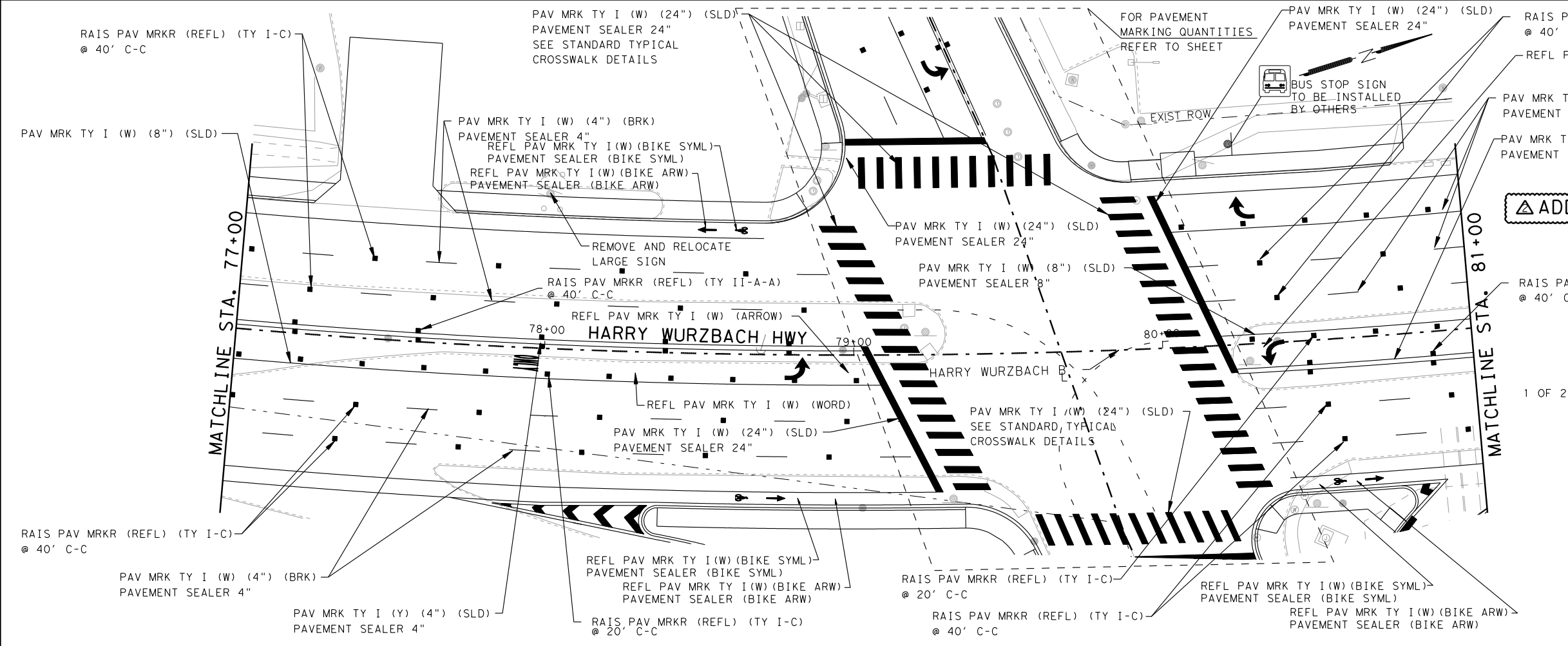


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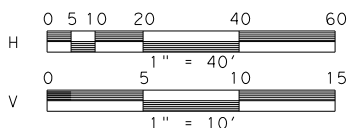


SHEET TOTALS		
DESCRIPTION	UNIT	TOTAL
INS SM RD SN SUP&AM COSA TY U MOUNT (POST TY 1)	EA	4.00
INS SM RD SN SUP&AM COSA TY U MOUNT (POST TY 2)	EA	0.00
REMOVE SM RD SN SUP & AM	EA	3.00
REFL PAV MRK TY I (W) 4" (BRK)(100MIL)	LF	710.00
REFL PAV MRK TY I (W) 4" (SLD)(100MIL)	LF	1,175.00
REFL PAV MRK TY I (W) 6" (BRK)(100MIL)	LF	66.00
REFL PAV MRK TY I (W) 8" (LNDP)(100MIL)	LF	100.00
REFL PAV MRK TY I (W) 8" (SLD)(100MIL)	LF	1,980.00
REFL PAV MRK TY I (W) 24" (SLD)(100MIL)	LF	804.00
REFL PAV MRK TY I (W) (ARROW) (100MIL)	EA	6.00
REFL PAV MRK TY I (W) (BIKE ARW) (100MIL)	EA	4.00
REFL PAV MRK TY I (W) (BIKE SYML) (100MIL)	EA	4.00
REFL PAV MRK TY I (W) (ENTR GORE) (100MIL)	EA	1.00
REFL PAV MRK TY I (W) (EXIT GORE) (100MIL)	EA	0.00
REFL PAV MRK TY I (W) (WORD) (100MIL)	EA	1.00
REF PAV MRK TY I (W) 18" (YLD TRI) (100MIL)	EA	0.00
REFL PAV MRK TY I (Y) 4" (SLD)(100MIL)	LF	1,480.00
REFL PAV MRK TY I (Y) 24" (SLD)(100MIL)	LF	40.00
REFL PAV MRK TY I (Y) (MED NOSE) (100MIL)	EA	2.00
PAVEMENT SEALER 4"	LF	3,365.00
PAVEMENT SEALER 8"	LF	2,080.00
PAVEMENT SEALER 24"	LF	844.00
REFL PAV MRKR TY I-C	EA	94.00
REFL PAV MRKR TY II-A-A	EA	47.00
RELOCATE LRSA	EA	2.00

NOTE: CONTRACTOR TO PROVIDE ENGINEERING DRAWINGS AND CALCULATIONS FOR DESIGN OF LARGE SIGN AND FOUNDATION RELOCATION. COMPLETE COST INCLUDING LABOR, MATERIALS, EQUIPMENT AND PROFESSIONAL ENGINEERING DRAWINGS (SIGNED AND SEALED BY PROFESSIONAL ENGINEER) WILL BE INCLUDED IN THE COST OF THIS ITEM. REFER TO SIGNING AND PAVEMENT MARKING SHEET 215 FOR LOCATION OF EXISTING SIGNS. THE ENGINEER SHALL PROVIDE THE NEW LOCATION OF THE SIGN.



ADDENDUM NO. 4



1 OF 2

TETRA TECH  
TBPE F-3924  
700 N. ST. MARY'S STREET SAN ANTONIO, TX 78205  
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CITY OF SAN ANTONIO  
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT  
FORT SAM HOUSTON TRANSPORTATION PROJECTS  
SIGNING & PAVEMENT MARKING LAYOUTS  
RITTMAN RD. & HARRY WURZBACH INTERSECTION

FINAL SUBMITTAL PROJECT NO.: 915-12-470,etc DATE: 8/21/2011  
DRWN. BY: RPR DSGN. BY: JDH CHKD. BY: RE SHEET NO.: 215